S. Hrg. 103–901

FEDERAL RESERVE: RECENT MONETARY POLICY ACTIONS

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

ON

THE IMPACT OF RECENT INTEREST RATE INCREASES AND THEIR IMPLICATIONS ON THE ECONOMIC STABILITY OF THE NATION

MAY 27, 1994

Printed for the use of the Committee on Banking, Housing, and Urban Affairs

U.S. GOVERNMENT PRINTING OFFICE

86–559 CC WASHINGTON : 1994

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-046901-5

86–559 O – 95 – 1

1
S. Hrg. 103-901

FEDERAL RESERVE: RECENT MONETARY POLICY ACTIONS

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

SECOND SESSION

ON

THE IMPACT OF RECENT INTEREST RATE INCREASES AND THEIR IMPLICATIONS ON THE ECONOMIC STABILITY OF THE NATION

MAY 27, 1994

Printed for the use of the Committee on Banking, Housing, and Urban Affairs

U.S. GOVERNMENT PRINTING OFFICE

86-559 CC WASHINGTON : 1994

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-046901-5

CONTENTS

FRIDAY, MAY 27, 1994

WITNESS

Additional Material Supplied for the Record

FEDERAL RESERVE: RECENT MONETARY POLICY ACTIONS

FRIDAY, MAY 27, 1994

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met in room 538, of the Dirksen Senate Office Building at 10:05 a.m., Senator Donald W. Riegle, Jr. (Chairman of the Committee) presiding.

OPENING STATEMENT OF CHAIRMAN DONALD W. RIEGLE, JR.

The CHAIRMAN. The Committee will come to order. Let me welcome all those in attendance this morning, and particularly our witness, Fed Chairman Alan Greenspan.

This is an important hearing this morning to review where we are with respect to the Fed's conduct of monetary policy, and I appreciate the Chairman coming today for that purpose.

As we know, the Fed has raised short-term interest rates in steps now by a full percentage point since Chairman Greenspan's last visit here to the Committee, which was in March of this year. We have requested this meeting to discuss the reasons for those moves and their implications and where we seem to be going now.

By way of review, the economy's performance recently has been very good. Over the past year, gross domestic product has risen a strong 3.7 percent, including this morning's upward revision in the first quarter. Which, as I understand it, has some technical aspects to it which the Chairman may get into later.

This kind of growth, of course, over the last year increases our national income which we want to see, and it helps reduce the budget deficit, and that has been a very stubborn problem, as we all know.

Growth over the past year has enabled the economy to create an additional 2.3 million jobs and has reduced the unemployment rate by a full percentage point. And that is after adjusting for change in how that unemployment rate is calculated.

While most economists, including the President's nominee for Federal Reserve Vice Chairman, Alan Blinder, believe that our economy is still operating below its full potential, the ratio of persons employed to the total adult population is now within 1 percentage point of its all time peak.

That is not to say we don't have problems in the job market of a different sort in terms of the backward slide out of higher paid jobs to lower paid jobs. But here we're talking just about the aggregate employment levels.

Looking at inflation at the same time, price inflation has not only remained subdued but it has continued to diminish. Over the past 12 months, the Consumer Price Index has gained only 2.4 percent, which is not far above the 1.5 percent figure sometimes cited as the innate upward bias in that index. The CPI's core inflation rate, which excludes volatile food and energy components, is the lowest since the mid-1960's, and that too is good news.

With inflation so well subdued and the pace of economic activity still less than the level generally considered to pose a risk of accelerating inflation, the Fed's aggressive interest rate policy deserves very careful public scrutiny. That's part of why we're here today.

As Professor Blinder told the Committee earlier this month:

> Having paid the price to achieve these gains on the inflation front, it would be sheer folly to squander them now.

And I agree with that. But I would also add to that, expressing my own opinion, it would also be foolhardy for us to needlessly bring this economic expansion to a premature shutdown, and that we can't afford, either.

Particularly troubling to me, as Chairman of this Committee, is the fact that we have seen a large increase in the long-term interest rates that has, in fact, accompanied the Fed's monetary policy adjustment actions.

Unlike previous tightening periods, Treasury bond yields have risen as much as short-term yields and are now more than 1.5 percentage points about last fall's lows, as are home mortgage rates.

There are a number of reports, which we'll talk about later this morning, that I have a concern about. The reports that I'm referring to suggest that the unwinding of some very highly leveraged positions in bonds by speculators using derivatives, may have played a significant role in terms of this unusual increase in long-term rates, as well as possibly a concern about our Nation's exchange rate policy.

These are both matters that we will examine this morning.

We also need to hear your detailed explanation for the decisions made by the Fed over the past few months, and how they fit into a longer-term strategy for the economy.

I'm going to be especially interested in your analysis on the behavior of bonds and foreign exchange markets recently and how they affect your monetary policy decisions.

Let me also say this. There are sharp differences of opinion by those of us who observe this closely and have related policy responsibilities in this area. And I have not, as you know, criticized Fed policy in terms of these recent adjustments. You and I have had the opportunity to talk from time to time about those decisions and the basis for them from your point of view.

For what it's worth, I would just express the view that I think now that those steps have been taken, it might be well for us to give the economy an opportunity to adjust to those changes to let those changes have the effect that they are in the process of having, to see how well the economy can digest those changes, and particularly because the markets are behaving somewhat differently than we've seen in the past, and to make sure that we don't cut the legs out from under this recovery that's underway.

I don't have a chart with me today, but I'm going to give you a mental chart for a moment.

We have had many discussions here, stretching back over the last several years when the economy was struggling and unemployment was high and we were having a real shortfall in national income and it was helping to balloon the Federal deficit.

In a sense, in my mind, we have a lot of lost ground to make up for. In other words, we've had to repair a lot of balance sheets, we've had to restore our job base, and we're working at that, but it seems to me we need now a period of sustained national income, not just to pay today's bills and tomorrow's bills, but to recoup some of the shortfall in years past.

It's a lot easier to say that and conceptualize it than it is to engineer the policy to actually make it happen, and you certainly know that, and we both, I think, appreciate that point.

It's essential that we keep the economy on a growth track because we need a period of sustained economic growth to allow us to get a much stronger footing under ourselves as a country.

I think the interest rate spread over the last few years has greatly helped, for example, the banks rebuilt their balance sheets. A lot of other financial institutions have rebuilt their balance sheets, and that's all to the good. We needed to have that happen. That was quite an urgent need. Much of it has been accomplished.

I think many families have lagged behind. There's a lot of balance sheet rebuilding and income statement rebuilding that has to be done for rank and file people, and in many ways, they're finding it very hard to do, partly because wage levels in many cases have either held constant or have declined. And now, in many families, both mother and father have to work as many as two jobs each to try to make enough income to really support a family. There are a lot of people doing part-time work, as you know.

So I would hate to see a contraction come along here and cut the ground out from under people who have been through a tough decade and who are now just beginning to get the prospect of being able to earn on a steady basis and have some savings, to get ahead and put some money aside for their children's education, and retirement, and other things.

When John LaWare was here, not long ago, to talk about the credit picture and how it would relate to monetary policy, he expressed a concern about home equity loans. I have a comparable concern in that area, and also in adjustable rate mortgages. I think one of the things that's happening right now with these upward adjustments in short-term interest rates is that already consumers, a lot of rank and file people and families, are feeling that price inflation in higher interest rates on their adjustable rate home mortgages, and also on their home equity loans.

One of the questions I want to ask you this morning, so I want to alert your technical people who are here with you today, is what the volume of outstanding credit is in that area, and as those higher rates bite in, how much purchasing power does that subtract from those families that now are going to have to pay those higher rates and not have that money available obviously for other basic needs.

I don't think we often think about interest rates when they're going up as a form of price inflation, but in a sense, they are just like anything else that people have to pay for that is going up and not holding steady.

I'll just conclude, before yielding to my colleagues, by saying that I think we've got enough going on in the economy, including the whole issue of how the financial markets are working and the leverage coming off derivatives, that perhaps letting these policy steps that have been taken have a chance now to have their impact, see how they play out over a period of time, let the economy breathe in this new condition, and see if we can stay on a proper growth track without an inflationary problem emerging, would seem to me to be a wise course. I mean, you get lots of opinions from a lot of different people. I think, if we over-correct here, in a sense, and tip this economy into a downturn, that would be a very severe error.

I know you don't intend to do that. I know you're mindful of the consequences of that. But I think we may be getting to a point where that balance may be such that we may need to pause here to see how these adjustments are taking hold.

In any event, let me how yield to my colleagues. First to Senator Sasser, the Chairman of the Senate Budget Committee, and then Senator Sarbanes.

Senator Sasser.

OPENING STATEMENT OF SENATOR JIM SASSER

Senator SASSER. Thank you very much, Mr. Chairman.

I want to welcome Dr. Greenspan here this morning.

I want to say, at the outset, that our purpose, or certainly my purpose today, is not to bash the Fed, as some people are fond of saying. Some believe that when you have Dr. Greenspan before the Committee, and have an opportunity to comment on the policy of the Federal Reserve Board, you are engaging in Fed bashing. Well, that's not what this is all about this morning.

But I think you know, Mr. Chairman, that I am very troubled by the recent actions of the Federal Reserve with regard to interest rates, and it's my hope that we can explore these concerns at some length this morning.

Now, my concerns over the Fed raising interest rates over the past few months are twofold. First, I believe these so-called preemptive strikes on inflation are purely speculative, and I don't believe, Mr. Chairman, that they are rooted in hard data. They're not rooted in hard data that either I or my staff have been able to discover. Second, I think they run the risk of having a withering effect on the economic recovery for which we've waited so long.

There's nothing in the economic data that I can find to indicate that this economy is running amok. I can't see why we've been spooked into raising these rates. Just let me mention a few of the recent reports issued by the agencies of the U.S. Government who have jurisdiction over these matters.

First, retail sales fell by 8/10ths of a percent in April with both auto and non-auto sales declining. Durable goods have shown no growth since January. Housing starts went down 2.5 percent in April, when you would expect housing starts to be going up in the

spring of the year. And look at what's happened to interest-sensitive single family starts. They have dropped by a worrisome 4.4 percent. I see no evidence that this economy's overheating.

Sometimes, when we get into these discussions of Federal Reserve policy, I think we lose sight of who's really affected. We talk about the bond market and long-term bonds, and we talk about the stock exchange and we talk about the markets. But it's working Americans who feel the pinch when the Fed tightens these rates. It's the working men and women of this country who are being squeezed out of the dream of homeownership. And that is a reality. I see it in my State. People tell me they can no longer afford to buy a house or they're worried that they may not be able to buy one.

These low rates, and the relatively liberal monetary policy that the Fed had been pursuing up to a few months ago, really gave new hope to a whole new generation. For the first time in a long time, young people could think about buying a house, young people of moderate means, purchasing a new home was the most affordable in a generation.

It's dismaying to see these hopes dashed by what I would have to characterize as an anxiety, an inflation anxiety neurosis. Too many working men and women have been waiting patiently for this recovery. And we don't see any evidence that there is an inflation in their wages.

How can the Fed say we have inflation when the growth of inflation adjusted wages has lagged significantly behind productivity growth for the last 3 years? Let me repeat that. How can we say that we're worried about inflation when the growth of inflation adjusted wages has lagged significantly behind productivity growth for the last 3 years?

Mr. Chairman, we look at the data that the pollsters give us and they ask the American people, how's the economy doing? Are you going to be better off this year? Are you going to be the same? Or are you going to be worse off? And there is no significant increase in those who say they're going to be better off, even though we have been in an economic recovery. It's because they don't have any perception that their wages are going up or keeping track with productivity.

Now, I just want to make these points, and I'll yield.

A tight monetary policy not only jeopardizes job restoration, it jeopardizes wage restoration as well. And the United States of America is becoming a relatively low-wage country. Who would have ever thought we'd see industries leaving Europe and coming to the United States because wages are lower here?

The American people are working harder than they have ever worked, they're seeing almost no improvement in their wages. They end up taking a second job and spouses are forced into the job market. When working Americans think they might get the first benefits of an economic expansion that they really have waited for a long, long time, the Federal Reserve hits the brakes and starts tightening down on the monetary policy.

I've had this discussion before with the distinguished Chairman. But we did our work in Congress. We tightened fiscal policy, and we are working hard to reduce this deficit.

We produced a package that the Congressional Budget Office said would reduce this deficit by $500 billion over 5 years. The latest reports indicate that that projection is too low and it's going to reduce the deficit over the next 5 years in excess of $600 billion, as much as $650 billion, according to some reports.

We've done our work here. We've tightened fiscal policy. We're cutting spending, and we're asking the Fed to be partners with us and continue to pursue a liberal monetary policy and give this economy enough oxygen to keep on growing. And there's plenty of space, I submit, Mr. Chairman, to do this without risk of inflation.

Well, I've said enough. Let me yield now, to Senator Sarbanes.

The CHAIRMAN. Let me just say, if I may, before calling on Senator Sarbanes, the data that we use indicates that if we can get another percentage point of growth into the economy, and we want to see a positive growing economy, that every 1 percent increase in growth will produce, in the following year, a $20 billion reduction in the Federal deficit. We've talked about this many times. I don't want to leave the deficit out of the discussion because we're trying to bring that down because that also impacts interest rates in terms of its effect.

So we need this positive growth because people need the incomes, but we also need it now to get this deficit down. We can't do it all with just fiscal tightening, as you well know.

Senator Sarbanes serves as the Vice Chairman of the Joint Economic Committee and was formerly its' Chairman.

Let me call on Senator Sarbanes for his comments, and then we'll go to you, Mr. Chairman.

OPENING STATEMENT OF SENATOR PAUL S. SARBANES

Senator SARBANES. Thank you very much, Chairman Riegle.

Chairman Greenspan, I'm pleased to join with my colleagues in welcoming you back before the Committee.

I do want to pick up on one thing that Senator Sasser made reference to right at the outset and that is, unfortunately, we get these reports every time we try to have an intense dialog with the Fed over their policy and what their thinking is behind it that somehow or other we're engaged in Fed bashing.

Now, I think the policies of the Fed are open to examination and, indeed, critique. You're not the Delphic Oracle, although, on occasion, I have to say you behave somewhat that way, but it's not simply handing down these edicts from on high. Those are humans down there, I assume, on the Board of Governors and on the Open Market Committee, and they can make judgments, and indeed they are fallible.

One of the things I think a lot of people in the country have been asking for is an explanation for the Fed's thinking, what's the rationale. Of course, the Fed simply hands down these one- or two-paragraph statements after making decisions. You've taken to doing that; before, you didn't even do that. It just kind of emanated out by some process of osmosis.

It is rare that we get you here. I think we need to get you here more often, and perhaps your colleagues on the Open Market Committee. I have a sense you're always having to take the brunt of it, and of course they all have a vote, just like you do.

I commend Chairman Riegle for calling this morning's hearing. It seems critical to me that we examine the reasoning behind the policy that the Fed has been pursuing. Misperceptions about the intentions of the Fed, which arise from a lack of explanation of the Fed's decisions, can, by themselves, affect the course of the economy.

It's interesting. Judges, of course, have to hand down opinions explaining their decisions and laying out the whole rationale for it. It seems to me that it is a very helpful exercise. First, it disciplines the decisionmaker because they then have to, in effect, develop a rationale and cast their decision in the context of that. Second, of course, it's helpful to people trying to understand the decision because they have a reasoned presentation before them.

Now, as you well know, I've had difficulty discerning the basis on which the Federal Reserve has pursued this policy of raising interest rates over the past 4 months. It's obvious that I'm not alone in that concern. After the announcement by the Federal Reserve of its most recent rate increase last week, the U.S. Chamber of Commerce issued a statement headed, "We Hope That Main Street Is Not Being Sacrificed For Wall Street."

Let me just read briefly from that statement:

> While we understand that today's moves were intended to calm jittery financial markets, we hope that Main Street is not being sacrificed for Wall Street. The Federal Reserve has justified its policy directly on its fear of future inflation. However, with virtually all current indices showing little or no inflation, and with many indicators showing that economic growth was already slowing from its rapid pace at the end of last year, we are becoming increasingly concerned that Federal Reserve policy may be moving too fast and too far.

We are concerned that monetary policy not choke off an economy that only recently has begun to generate income and job growth, a concern expressed by both of my colleagues here already this morning.

The AFL–CIO also issued a statement last week. I'd like to just quote briefly from that one:

> The Federal Reserve Board's latest interest hikes are unjustified. The country is far short of the goal of full employment and inflation is nowhere in sight. We fear that the only real impact of the Fed's latest actions will be to quell economic activity and keep people from getting jobs.
>
> At a time when 8.4 million Americans are out of work and another 6.6 million working part time or having sought work without success, the Federal Reserve Board's actions dash the hopes of many Americans for gaining and holding employment.
>
> Previous rate hikes by the Fed have already raised mortgage rates, hurt the housing construction market, and now threaten to put the cost of a new home even further out of the reach of many working Americans.
>
> We urge the Federal Reserve Board to change course before more damage is done.

Now, I sent down to you the testimony that we received here from the Home Builders about the impact, even before the latest move of the raise in interest rates on home building orders, and the testimony of the Small Business Legislative Council, again saying that they thought the recovery was fragile and that they felt that the Fed was running the risk of nipping the current economic recovery in the bud.

I think we understand the rationale that says, if you get growth, strong, sustained growth over a period of time, an extended period of time that begins to tighten labor markets, begins to fill up or use capacity, and begins to indicate there might be bottlenecks develop-

ing in the economy which would lead to a run up in prices, that throttling back on the economy is a way of trying to preclude that growth from leading to inflation.

What I find perplexing about the current conduct of monetary policy by the Federal Reserve is that it is taking place in an environment in which there appears to be little sign of inflation. In fact, the economy generated less inflation last year than any time since the early 1960's, with the exception of the 1 year here in the mid-1980's when the bottom fell out of the oil market.

But the 1994 rate to date, yearly rate, is at 2.4 percent, and we haven't been at that figure since 1965. So we have the best performance on the CPI in almost 30 years, yet we're getting a preemptive strike or so we're told against inflation. And of course, the preemptive strike, in my judgment, ends up being a strike against economic growth and job restoration.

The Producer Price Index has, in fact, declined 4/10ths of a percent over the last 12 months. Now, at the end of January, you indicated that you thought the CPI may not be the best measure, and you thought final sales to domestic purchasers, the deflator, might be the best measure.

Well, if we use that, again, we get a very strong performance on the inflation front. The first quarter of 1994, you have to go back to the first quarter of 1964, 30 years ago, to have a comparable performance with respect to final sales, a four-quarter change in deflator to final sales to domestic purchasers.

Then some say, well, let's look at labor costs. Let's look at unit labor costs. Of course, labor costs are what, about 2/3, I guess, of the costs. We hear a lot about commodity prices, but commodity prices are only a small percentage of what's factored into costs. Labor costs are at a 29-year low. The 1994 yearly rate to date, 8/10ths of a percent, has risen 8/10ths of a percent. With productivity gains actually outstripping real wage and benefit increases, labor costs will continue to hold down inflation.

And I know commodity prices have moved around a bit. They're characteristically volatile. In comparison with their recent runup, commodity prices rose by much more in 1983, 1984, and roughly the same degree in 1992. No general inflation upsurge followed either of those runups since commodity costs represent only a small fraction of total costs.

Capacity utilization is at moderate levels. In fact, some think the official measures are overstated. There's a body of analysis that thinks the official measures used for capacity utilization are overstated.

Industries with higher utilization rates generally face intense international competition. There's substantial unused capacity abroad. In fact, foreign competition is more intense today than ever before, and it's keeping a damper on wages and prices in the U.S. market.

All of this, I think, because I know the Fed is making a lot of reference to historical levels and historic norms, but it seems to me the one major factor that has changed in the current context from previous historical experience are the congressionally passed budget resolutions and the budgets enacted pursuant to them, which are restrictive, restraining, constraining budget resolutions.

Fiscal policy, as you urged us to do repeatedly before this Committee, I mean, I can shut my eyes and hear you telling us on occasion after occasion about the necessity to pass budget resolutions that constrained fiscal policy. And under the extraordinarily effective leadership of Chairman Sasser, we've done exactly that. We've got the Federal budget deficit on a downward trending line.

So, for the first time, if you look at the historical context, we're dealing with the situation in which the fiscal policy side of our economic arsenal of tools is, in fact, restraining the economy, not providing it an impetus. The question then is, where is the impetus to come from in order to get some economic growth and some job restoration?

Of course, it was there that we were looking to the Federal Reserve to give us some lift. We got it for a while, and the interest sensitive sectors picked up. But now that's moving in the other direction. The recent figures retail sales fell 8/10ths of a percent in April with both auto and non-auto sales declining. The 4-week moving average of initial claims for unemployment insurance has risen 6 percent over the last 8 weeks. Housing starts went down 2.5 percent in April, with housing starts and single family starts dropping a worrisome 4.4. percent.

Now, let me just make the point of what this means in the housing area. My colleagues, Senator Sasser and Senator Riegle, talked about how this was hitting working people, the ordinary consumer.

You took the rates up the other day. The banks immediately jumped the prime rate ½ a point. That gets fed out into business loans. That gets fed out into consumer credit charges. That happened right away. The payments on the deposits into the financial institutions did not go up by ½ a point, but the charges out of the financial institutions went up ½ a point.

But let me just talk about the impact in the housing field. These are mortgage interest rates on a 30-year conventional mortgage. Now the week of February 4, 1994, before you started moving the rates up, 6.97 percent. The week of May 20, 1994, 8.56 percent. And we've had a little bit of a stabilization. I'm sure you're going to make something on that point in your testimony today.

I just want to make this observation. Even if now the loan rates stabilize for awhile, my prediction is that the Wall Street traders are going to be back at you and the Open Market Committee, if not at the next Open Market Committee meeting, the one after that, to move the rates back up again.

Even if you get some stability here for awhile, what has happened is that we moved from this level down here to this level up there. No one's really talking about a significant drop in this level. We're hopefully going to have some stability.

Some say, well, maybe loan rates will come down a little bit. But we have moved to an entirely different plateau, and of course, what that means—now we're getting calls in my office from people who can't afford to go through with their commitments on building new homes because they can't handle the monthly payments. The jump in the monthly payments, as a consequence of this jump in interest rates, in effect, has put them out of the market.

Now, obviously, these are the things we want to examine this morning. I wouldn't be true to form if I didn't close with just a cou-

ple of editorial cartoons that have appeared, which I think reflect the concern across the country, and the perception with respect to what the Federal Reserve is doing.

This is out of a Florida paper. This is supposed to be you.

[Laughter.]

I can tell because it says "Greenspan" right there. And you are carrying this sign that says, "The economy is picking up, we are doomed." But there's a lot to that. What is happening is, any time we get some good growth, even if it's not reflected with a perceived inflation problem, we're told, well, we've got to move to cut the growth down. So every time the economy comes up out of the water to catch its breath, you move in and push it right back down again, especially in the context in which fiscal policy, for the first time—I don't think enough weight is being given to the fact that there's been a major shift in fiscal policy, a shift that was urged upon us by you and many others and recognized by us as being necessary and desirable in order to change the trend lines on the Federal budget deficit.

And the other one, which I'm very partial to, since this is spring, this says, "Gardening With Greenspan." At the first sign of spring growth, just when the recovery starts to sprout, and you can see it coming up out of the ground there, stomp on it.

[Laughter.]

It's a rather intense expression on your face there, Mr. Chairman.

[Laughter.]

This eliminates the need for pruning. And we're asking the Federal Reserve to do some pruning, is what we're asking for, rather than some stomping on it.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Chairman Greenspan, I think the comments you've heard this morning will give you some sense of the feeling that exists throughout the Senate and in the Congress, and reflects views held by many people in the country.

When we extended this invitation to you, you quite readily accepted the opportunity to come, and I know you have views you want to express, and we're very eager to hear them. We'll make your full statement a part of the record, and we'd like you to take whatever time you'd like to lay out your presentation.

STATEMENT OF ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, WASHINGTON, DC

Chairman GREENSPAN. Thank you very much, Mr. Chairman. I appreciate this opportunity. And while I obviously won't confront all the particular issues that you and the Members have introduced, I will try to get to most of them in my prepared remarks, but hopefully all of them during the question and answer period.

The Federal Reserve's moves to increase short-term interest rates this year are most appropriately understood in an historical context.

In the spring of 1989, we began to ease monetary conditions as we observed the consequences of balance sheet strains resulting from increased debt, along with significant weakness in the collat-

eral underlying that debt. Households and businesses became much more reluctant to borrow and spend, and lenders to extend credit, a phenomenon often referred to as the credit crunch. In an endeavor to diffuse these financial strains, we moved short-term rates lower in a long series of steps through the summer of 1992, and we held them at unusually low levels through the end of 1993—both absolutely and, importantly, relative to inflation. These actions, together with those to reduce budget deficits, facilitated a significant decline in long-term rates as well.

Lower interest rates fostered a dramatic improvement in the financial condition of borrowers and lenders. Households rolled outstanding mortgage and consumer loans into much lower rate debt. Business firms were able to pay down high-cost debt by issuing bonds and stocks on very favorable terms. And banks, which had cut back on credit availability partly because of their balance sheet problems, were able to strengthen their capital positions by issuing a substantial volume of equity shares and other capital instruments and by retaining much of their improved flow of earnings.

Moreover, the lower interest rates, together with expanding economic activity, recently have bolstered the commercial real estate market, stemming losses on the collateral underlying some of the largest problem credits of banks and other intermediaries, and in some cases, permitting them to find purchasers for these assets.

The sharp sustained decline in debt service charges and the restructuring of balance sheets alleviated the financial distress, enabling the economy to begin to move again in a normal expansionary pattern.

When I last testified before you on monetary policy, in July 1993, the likelihood that the economy would soon respond more vigorously to these financial developments already was evident both to the Federal Reserve and to numerous outside analysts. Indeed, I mentioned that, with short-term real rates not far from zero: "Market participants anticipate that short-term real interest rates will have to rise as the headwinds diminish if substantial inflationary imbalances are to be avoided." But lingering questions into the second half of 1993 about whether the economy had fully recuperated made the appropriate timing of such action unclear.

Since the latter part of 1993, however, the expansionary effects of the monetary policy of the past few years have become increasingly apparent. Although quarter-to-quarter developments are subject to considerable statistical noise, in an underlying sense real gross domestic product clearly has accelerated. Strength has been particularly evident in interest-sensitive sectors. Business investment has been quite robust and order books for producers of durable equipment have expanded appreciably. Housing starts rose in the last 3 months of 1993 to their highest level in over 4 years; although they have dropped back some more recently, they remain 18 percent above a year ago. Demand for motor vehicles has been strong, lifting production of many types of automobiles and light trucks to capacity. Moreover, as economic conditions have improved in other industrial countries, the growth of our merchandise exports has picked up markedly. Overall, industrial capacity utilization has increased to 83.5 percent, its highest level since the late

1980's. In excess of 2 million jobs have been created over the past 12 months, and the unemployment rate has fallen substantially.

In this more robust financial and economic climate, expansion of money and credit has picked up. Business loans, which had contracted over the 1990 to 1993 period, grew at a 9.5 percent annual rate in the first 4 months of 1994. Bank lending to consumers also has been quite brisk. The pickup in loan growth seems to reflect both stepped-up short-term credit demands, as well as a greater willingness on the part of banks to extend credit. Our surveys, as well as anecdotal reports, indicate that banks have been easing standards and terms on business loans for more than a year, and they have become more aggressive in seeking to extend consumer and residential mortgage loans. The total debt of private borrowers and State and local governments, which had risen at only a 2.5 percent annual rate over the first half of 1993, accelerated to more than a 4.5 percent rate over the second half, and has maintained a stronger pace during recent months. Although ongoing portfolio adjustments have kept growth in M2 relatively sluggish, it has been increasing a little more quickly this year than last.

Given the stronger economic and financial conditions, it became evident by early 1994 that the mission of monetary policy of the last few years had been accomplished. The so-called headwinds were substantially reduced, and the expansion appeared solid and self-sustaining.

Having met our objective, we confronted the question of whether there was any reasonable purpose in maintaining the simulative level of interest rates held throughout 1993. The answer to that question was no. Maintenance of that degree of accommodation, history shows, would have posed a risk of mounting inflationary pressures that were perceived as wholly unacceptable. Given the resumption of more normal patterns of economic activity and credit flows, a shift in policy stance was clearly indicated.

The question that remained was how to implement this shift. The economy looked quite robust, but we were concerned about the effects on financial markets of a rapid move away from accommodation. Short-term rates had remained unusually low for a long-time and long-term rates persisted well above short-term rates. The resulting attractiveness of holding stocks and bonds was further enhanced by a nearly unbroken stream of capital gains as long-term rates fell, which imparted the false impression that not only were returns on long-term investments quite high, but consistently so. The recovery of the stock market after the October 1987 crash, along with the successful fending off of any significant adverse consequences from that event, may also have contributed to investor complacency. Moreover, in these extraordinary circumstances of persistent low short-term interest rates, moderate growth in the economy, and gradually diminishing market concerns about future inflation, fluctuations in bond and stock prices around broad trends remained quite narrow by historic standards.

Thus, lured by consistently high returns in capital markets, people exhibited increasing willingness to take on market risk by extending the maturity of their investments.

In retrospect, it is evident that all sorts of investors made this change in strategy—from the very sophisticated to the much less

experienced. One especially notable feature of the shift was the large and accelerating pace of flows into stock and bond mutual funds in recent years. In 1993 alone, $281 billion moved into these funds, representing the lion's share of net investment in the U.S. bond and stock markets. A significant portion of the investments in longer-term mutual funds undoubtedly was diverted from deposits, money market funds, and other short-term, lower-yielding, but less speculative instruments. And some of those buying the funds perhaps did not fully appreciate the exposure of their new investments to the usual fluctuations in bond and stock prices. To the degree maturity extension was built on a false sense of security and certainty, it posed a risk to financial markets once that sense began to dissipate.

Federal Reserve moves initiated in February along with a number of other developments in the United States and other major industrial economies in the same period were instrumental in radically altering perceptions of where interest rates were going and of the risk of holding long-term assets. In early February, we had thought long-term rates would move a little higher temporarily as we tightened, but that anticipation was in the context of expectations of a more moderate pace of economic activity both here and abroad than emerged shortly thereafter.

The sharp jump in rates that occurred appeared primarily to reflect the dramatic rise in market expectations of economic growth and associated concerns about possible future inflation pressures. The behavior of interest rate spreads between Treasury and private debt, or credit-risk premiums, in securities markets offers confirming evidence; the fact that such spreads failed to widen, even as long-term interest rates rose dramatically, suggests that the rise in long-term rates was seen by market participants as a consequence of a strong economy, not a precursor of a pending weak one. Given the change in economic conditions and the market's perception of them, longer-term rates eventually would have increased significantly, even had the Federal Reserve done nothing this year.

The rise in long-term rates has reflected increased uncertainty as well as expectations of a stronger economy. While generally expected, the move from accommodation, interacting with the news on the domestic and global economy, triggered a re-examination by investors of their overly sanguine assumptions about price risk in longer-term financial assets. As volatility and uncertainty increased, people began to reverse their previous maturity extensions. They fled toward more price-certain investments at the short end of the yield curve. For example, some flows into bond mutual funds were reversed; investors, fearing further rate increases and awakening to the nature of the risk they had taken on, shifted funds back into shorter-term money market mutual fund and deposits. The sales of securities by bond mutual funds likely contributed to pressures on yields, especially in markets in which they had been important buyers.

Such reduced confidence about predictions of future interest rate movements evidently is a key element in explaining one of the more unusual characteristics of financial market developments in this recent period—the apparent degree of coupling of bond rates in many industrial countries facing different cyclical situations. To

86-550 O - 95 - 2

be sure, part of the rise in long-term rates in other countries is accounted for by a brighter economic prospect, especially in continental Europe and, to some extent, in Japan, so that market participants now expect less monetary policy ease in those regions.

But added to this were the effects of additional uncertainty. In globalized financial markets, with investors having increasingly diversified portfolios across currencies, uncertainty, wherever it originates, can have similar effects on markets for securities denominated in a variety of currencies. When investors were confronted with a market environment they did not anticipate, they quickly disengaged not only from dollar assets but from all investments that rested on a confident view of the future. The loss of confidence in one's ability to perceive the future does not discriminate between investments in dollar—or mark—denominated securities, for example. The process of disengaging largely resulted in sales of stocks and bonds with the proceeds placed in short-term debt instruments whose prices tend to be more stable. As a consequence long-term rates rose appreciably in most industrial countries. That the effects of decreased confidence partially overrode the differences in economic conditions between the United States and our major trading partners is evidence of the degree of uncertainty in financial markets.

Because we at the Fed were concerned about sharp reactions in markets that had grown accustomed to an unsustainable combination of high returns and low volatility, we chose a cautious approach to our policy actions, moving by small amounts at first. Members of the Federal Open Market Committee agreed that excess monetary accommodation had to be eliminated expeditiously, and a rapid shift would not in itself have been effective to destabilize the economy. We recognized, however, that our shift could impart uncertainty to markets and many of us were concerned that a large, immediate move in rates would create too high a dose of uncertainty which could destabilize the financial system, indirectly affecting the real economy. In light of the substantial variations in prices of financial assets over the last few months as we adjusted our posture, our worries do seem to have been justified. Delaying our actions would not have been constructive; unrealistic expectations would only have become more firmly embedded and the inevitable adjustment in the financial markets could have been far more difficult to contain. Through this period, many of those who had purchased long-term securities with unduly optimistic expectations about the level and fluctuations in yields have made the needed adjustments. Thus, we at the FOMC judged at our May 17th meeting that we could initiate a larger adjustment without an undue adverse market reaction.

Indeed, markets reacted quite positively on balance, perhaps because they saw timely action as reducing the degree and frequency of tightening that might be needed in the future.

We initiated the removal of excess monetary accommodation without widespread indications that inflation has picked up. To be sure, manufacturers have reported paying higher prices to suppliers and prices of basic industrial commodities have risen a good deal in recent months. Moreover, the behavior of the dollar on foreign exchange markets over the past several months has been a

source of some concern, but wage growth has remained moderate, and unit labor costs well contained by marked improvements in productivity. To date, underlying cost increases have been absorbed with little evidence that they have yet passed through into prices for final products.

If we are successful in our current endeavors, there will not be an increase in overall inflation and trends toward price stability will be extended. And to be successful, we must implement the necessary monetary policy adjustments in advance of the potential emergence of inflationary pressures, so as to forestall their actual occurrence. Shifts in the stance of monetary policy influence the economy and inflation with a considerable lag, as long as a year or more. The challenge of monetary policy is to interpret current data on the economy and financial markets with an eye to anticipating future inflationary or contractionary forces and to countering them by taking action in advance.

The alternative—maintaining an accommodative monetary policy until inflation actually begins to pick up—would be detrimental to the best interests of our Nation's economy. History unequivocally demonstrates that monetary accommodation, when the economy is strong, risks a significant acceleration of inflation. Because of the lags in the effects of monetary policy, inflation once initiated would likely continue to rise for a time, even after monetary policy began to tighten. Inflationary expectations would begin to increase, influencing patterns of wage bargaining and interest rates. As a result, monetary policy would need eventually to tighten more sharply than if a more timely and measured approach is taken, possibly even placing the continuation of the economic expansion at risk.

Such go-stop policies—implying appreciable fluctuations in inflation rates and amplified business cycle swings—surely impede long-range economic planning, saving, and investment, and diminish our economy's prospects for long-term growth and our ability to employ our growing labor force.

We have attempted to avoid such an outcome by taking actions this year that have substantially removed the degree of accommodation that had been in place last year. Our judgment was that with the financial condition of both borrowers and lenders greatly improved, such action would not impede satisfactory economic growth, but rather would help such growth to be sustained. Clearly, uncertainties regarding the economic outlook remain, and the Federal Reserve will need to monitor economic and financial developments to judge the appropriate stance of monetary policy. Our intention is to promote financial conditions under which our economy can grow at its greatest potential, consistent with steady, noninflationary expansion of employment and incomes.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Chairman Greenspan, let me just say there will be some differences of opinion, understandably, on some of the points raised, but I want to indicate to you that I appreciate the care with which you've constructed this statement and presented it here this morning. I think this is the clearest laying out of the thinking of the Fed, and presumably your thinking, that we've seen thus far, and it's very helpful for us to have that to put it in the

context of what your logic flow is, why you're taking the actions you are. Let me go into some parts of it.

I'm struck, and I think it is new information, by the emphasis that you give here in your statement, and it is said directly but with some subtlety, about your concern about what was happening in financial markets and about investor complacency, and the manifestations of that. The impression that one gets from reading it, and then hearing you deliver it, was that there may have been some speculative build-up in the markets based on unrealistic expectations, and that that was a matter of concern to you. And that part of the reason that the adjustments in monetary policy were set in motion was to deal with maybe too much speculative build-up in the financial markets. Is that a fair conclusion to reach?

Chairman GREENSPAN. I would say we were clearly concerned about that possibility. It was not, in our judgment, a build-up of destabilizing proportions but it did have some of the characteristics of the early stages of the process which we thought would be adverse eventually to our system.

The CHAIRMAN. Now, haven't we seen—there's been a sell off in the markets, there's been a lot of transactional activity. The stock averages are down. Long-term interest rates are up, I gather, more than you thought they might be, and I'll come back to that.

There was the unwinding of a lot of positions. It looks like, from what one can read, that there was a lot of leverage out there. A lot of people, when they had to suddenly de-leverage, appear to have lost a lot of money. Isn't that part of what's happened since you've started these moves?

Chairman GREENSPAN. I wouldn't argue that it is leverage so much as extension of maturities to more price-sensitive type instruments which probably have the same impact as leverage but it's the issue more of the maturity extension than whether those instruments have been borrowed against or in any way leveraged through other means.

The CHAIRMAN. Did that have the effect of creating unusual volatility in the long-term bond market?

There have been a number of stories written, one major lead story in the Wall Street Journal, among others, that as the changes and expectations occur, and people had to work their way out of positions that led to an unusual volume of activity in the long-bond market, and that may have, in fact, been reflected in what we've seen in long-term interest rates.

Chairman GREENSPAN. That's our understanding, Mr. Chairman. We also have the capability of making judgments of what the implied volatility or uncertainties relevant to the long-term bond markets were in the options markets.

In other words, we can infer the degree of uncertainty about the level of fluctuation in the bond markets by observing how options on bond futures and bond functions, and that shows a very significant increase in the degree of implied volatility in recent months, suggesting that there is a very marked change from an earlier period when the presumption was that very little in the way of fluctuation was likely to occur.

The CHAIRMAN. You talk of this concern about people in the markets having an unrealistic expectation about the way things have

been going, that they might just continue that way. Now, you've made the policy changes, there have been some adjustments, there's been market volatility. There have been some major price level adjustments, both for stocks, equities, and bonds. Do you think that adjustment process has now pretty much run its course, or do we still have, in a sense, unrealistic expectations built into price levels out there; and therefore, whether you call it speculation, or you give it another name, that there is still a problem out there in those markets of expectations readjustment that's going to have to take place to make you feel comfortable?

Chairman GREENSPAN. Mr. Chairman, as I said in my prepared remarks, it was our judgment that a significant part of the adjustment had taken place prior to our May 17th meeting. Indeed, that was the reason why we felt comfortable that we would not unduly disrupt the market by an increase of 50 basis points in the funds rate and a comparable 50 basis points in the discount rate.

I don't think that we have the insight nor, in my judgment, does anyone have the capability of definitively answering the question you just asked. Obviously it's a very important one, but I don't think it is readily answerable, and we will observe the markets and hopefully we'll begin to understand how this process has evolved.

The CHAIRMAN. Would it be fair for me to conclude, though, in that area, that this is now not an area of great concern for you? That you feel we've worked that through at this point?

Chairman GREENSPAN. I would certainly say that it is clearly a lesser concern than it had been at an earlier time.

The CHAIRMAN. I'm not sure how much that helps us because I think we're trying to figure out whether we've dealt with that, or whether we're going to have to continue to deal with it, and we've got another bumpy ride ahead in terms of further adjustments.

Chairman GREENSPAN. Well, I don't want to get into a judgment or forecast of how the international financial markets—and, indeed, we are dealing with international financial markets—are going to behave in the period ahead. It's tough enough to evaluate what happened behind us. Trying to look the other direction is extremely difficult.

Obviously, we all have hypotheses. We're making continuous judgments about how we think the process is evolving. But I don't think I could add very much insight by merely speculating on things on which the evidence is very difficult to infer.

The CHAIRMAN. Based on what you have said here, it provides a basis for a point I made at the outset, and I think maybe we've reached a point where we ought to pause before we adjust policy again to see how things settle out. In other words, you say you moved in small steps initially because you didn't want to create too much reaction. As things began to adjust themselves and work themselves to levels that were more realistic, and you felt more comfortable with, you finally reached the point where, in late May, you felt you could take a bigger step and not get an exaggerated reaction.

I draw from that that now, in that area, you've gotten most of what you want to do done. Maybe this would be the time to take a pause. And let me tell you why.

I'd now like to go over to the consumer side of this and I hope somebody is with you that can give us some rough data. You may have it yourself, in your own mind, but I am concerned as to what the upward adjustment in short rates is starting to do with respect to consumer behavior because we do have a lot of outstanding adjustable rate loans and home equity loans. You have had a short upward adjustment in interest rates, you are obviously cutting into the disposable income of people because you have priced up rates and that, at least, there's an interest rate inflation that people are now dealing with who are in that situation.

We're looking at consumer data. In the Weekly Economic and Financial Commentary Report put out by Merrill Lynch, they're talking about how consumer spending is decelerating while inflation remains in check. It says:

> Looking more closely at the data, the weakness was broad-based as sales rose in only two categories, housing and related furniture and building materials sales fell in April, reflecting higher interest rates.

And it goes down, I dropped down here. It says:

> Department store sales seem to be slowing to a crawl.

As you watch consumer behavior start to adjust here, due in part to the Fed's moves, expectations, and the real adjustment in their own economic circumstances, how much slow down are we starting to see?

In part, that was your goal, to take some of the steam out of the economy. How much slowing down have we seen that you are able to measure? I realize that there's a lag in these statistics, but what is the impact that you can measure that is starting to accrue in terms of economic slow down?

Chairman GREENSPAN. If you're asking essentially how much of a rise in short-term rates impacted on the issue of interest costs of households and interest received, we can make rough judgments. I mean, we know, for example——

The CHAIRMAN. Also general behavior. We know that people are very sensitive to these signals, and their behavior changes. It looks like we're getting some behavior changes, aren't we?

Chairman GREENSPAN. It's too soon to tell. We're not seeing any major changes. But I would presume that they will occur because, indeed, if they didn't, then obviously the economic activity, or rather the monetary policy that we're involved in is disconnected from the economy.

There is a tricky problem that is occurring here, and that is that at the same time that we are raising rates at the short end of the market, commercial banks are easing terms. At the moment, what we're seeing is that loan demand at the banks, for example, has accelerated quite significantly, and as we've seen from some of our data on installment credit, it's still running at a fairly robust pace.

It's hard to differentiate the impact of the suppression effects from rising interest rates, and the easing effects that occur as a consequence of a very significant dissolving, finally, of the credit crunch.

But I do take your point, and you're quite right that these types of actions begin to have some impact. The actual amount of income loss that is occurring is relatively small—that is, if you take a little over a percentage point increase in the short end of the market,

and you apply it to, say, the variable rate mortgages and equity loans, it's $6, $7, $8 billion—it is not a large number.

There's a larger number, obviously, which occurs with respect to long-term mortgages. That has an effect, in part, because, as I've mentioned here on previous occasions, one of the elements of financing in consumer markets occurs as a consequence of the turnover of existing homes. When homes turn over, the buyer of the home tends to take out a larger mortgage than the seller expunges, and there is a net increase in mortgage debt on existing homes, a significant part of which reflects just plain cash going into the hands of the seller. As far as the seller is concerned, it's unencumbered money, and it does affect consumer durable purchases as best as we can judge.

Now, clearly, to the extent that long-term interest rates in the mortgage market impact on existing home sales, that will clearly have an impact on the flow of cash to consumers. And indeed, that process, I would suspect, will show up. It's not clear at this stage. As you know, existing home sales are still at a fairly high level. In fact, the last figure I saw, as I recall, was at a $4.15 million seasonally adjusted annual rate which is pretty hefty, even though it's off from the peaks late last year. But I would suspect that we will see some simmering down in this area. Indeed, that's implicit in our view of the way the economy is running. However, I must say to you, overall, that this looks like a well-balanced economy. As I said at the Joint Economic Committee back in January, I thought that this was as good an economy as I've seen evolving in a balanced form in a very long period of time.

Senator SASSER. You said two or three decades, Dr. Greenspan. That's what you said.

Chairman GREENSPAN. I did indeed.

Senator SASSER. I wrote it down, and I quoted you all over the country as having said that.

Chairman GREENSPAN. I will repeat it here, Senator. Economic forecasting, needless to say, is a treacherous art, and when one looks into the future, it's just a degree of how much cloudiness you see, but it's never all that clear. But taking that in this context, there are very interesting issues here. One, the inventory levels are low. They are not unbalanced, which is usually a sign that we don't have to be overly concerned about rising interest rates inducing a significant liquidation of inventories which historically has been a major factor in cyclical declines.

There's another issue that we are beginning to become more aware of than we had been. That is the significance of low inflation on long-term economic growth. We've done a lot of work demonstrating that there is a quite robust relationship between the rate of inflation on the one hand and the rate of growth of productivity on the other. The lower the inflation, the higher the productivity growth rate. There is a dispute within the academic profession as to which causes which. We are increasingly persuaded that it is the low rate of inflation which is inducing a higher rate of growth in productivity.

And when one looks at the tradeoffs, with respect to how one implements monetary policy, you cannot be but persuaded of the extraordinary gains that seem now to be occurring in the underlying

growth rate of this economy, which I suspect—but I grant cannot conclusively demonstrate—is the result of low inflation. But to the extent that that evidence continues to emerge, I'm convinced that we have to, as Vice Chairman Designate Blinder indicated, not dissipate the gains that we have made because I suspect they are quite formidable.

The CHAIRMAN. I'm going to yield to Senator Sasser. That last response was an important one. It took a long time so it took me past my time period. I'd like to hear what your forecast now is for growth for the second quarter. What are you anticipating?

Chairman GREENSPAN. We are going to have to take a look at the details now that we have the revised data on the first quarter. All I can say to you is that there's clearly no evidence of diminishing growth in the numbers. We are, as Senator Sasser pointed out, looking at somewhat softer retail sales in April. But even at those levels, they were higher than the first quarter as I recall.

I would be disinclined to be very concrete about estimates of specific numbers because it's far more important for us to get a sense of what the process is. And what I would like to communicate is, as I've said back in January, and I will continue to say now, is that the process looks pretty good.

The CHAIRMAN. We'll come back to that.

Senator Sarbanes will go next.

Senator SARBANES. Thank you, Mr. Chairman.

Chairman Greenspan, I want to follow up on a point that Chairman Riegle was making. But before I do that, I just want to develop one other line of questioning to you. Do you recall a period when fiscal policy was as restrained as what we're pursuing now?

Chairman GREENSPAN. Sure, many times. I am impressed, incidentally, with the caps that have been put on within the sense that I didn't really think they would hold. The truth of the matter is, I think they are, and that is clearly a very important change in the budgetary process that is going on. And I hope that it will remain.

Senator SARBANES. In fact, the growth in the first quarter of this year would have been a point higher but for the cut in Federal spending. Isn't that correct?

Chairman GREENSPAN. I suspect that could very well be the case. I have not done the actual calculation, but that would not surprise me. But the point here is that we still have, as we have discussed in the last year or so, the longer-term problem of 1998, 1999, and the turn of the century where, as you may recall, we discussed the concerns that the deficit begins to open up as defense expenditures bottom out and the entitlement programs, specifically in health care, begin to take hold.

Senator SARBANES. That's why we're working so hard on the health care problem right now.

Chairman GREENSPAN. But the point I want to make here is that we cannot let our guard down on budget issues. A goodly part of the improvements that are occurring in the budget are occurring because the economy is doing better. And rather than emphasize the notion that the budget constraint has been negative, that is, a fiscal drag, I would argue, as I argued last year, that the reduction in the budget deficit has been a positive, not a negative factor.

Senator SARBANES. I think that's a valid point if it's combined with a monetary policy that enables us to provide some lift to the economy. Now, if we don't have that, if we develop a fiscal policy designed to reduce the budget deficit which, in effect, is constraining upon the economy, and the monetary policy also becomes constraining upon the economy, then it seems to me we have a real danger of throwing the economy.

I'm struck by—well, here's an article, the Fed's latest mistake, headed: "Mini Recession: The Federal Reserve's Decision." This was on the op ed page of the New York Times a few days ago. The Federal Reserve's decision on Tuesday to raise short-term interest rates by half a percentage point was a mistake. The country's economic expansion isn't strong enough to tolerate this latest monetary tightening. We may already be headed into a mini-recession.

And then Bart Rowan, who's a very able columnist says:

> The Fed was wrong to raise rates and probably has cut recovery short. In all probability the Fed has set in motion a series of events that will cut short a modest economic recovery.

And he goes on, of course, to develop that point.

Now, the line of questioning I wanted to follow up that Chairman Riegle opened was this view of the reasons for the Fed's action.

There was an interesting story that appeared by Lou Utchitelle, in the New York Times about 10 days ago, which I'm sure you saw. "Why The Fed Acted: Inflation May Not Tell The Whole Story. Other Events Conspired to Cause Alarm." I want to quote from it a little bit to set the basis for the question:

> On the face of it, the Federal Reserve raised rates on Tuesday mainly to take some of the steam out of a growing economy so that it would not become inflationary. But that explanation offered by the Fed itself hardly tells the whole story.
>
> Quite apart from inflation, which is still quite modest, the Fed was forced to deal with a concoction of events, most of them only loosely connected to the real economy that had pushed up interest rates. More than in the past, rates and reality became disconnected. Even Paul Volker, the former Fed Chairman, famous as an inflation fighter in the 1980's, acknowledged as much. 'The apparent sensitivity of the markets to inflationary fear seems overdrawn,' he said, in a recent speech that he cited again during an interview. 'I am not in the school of those concerned that any significant economic growth would bring stronger price pressures.'
>
> The problem is that the higher interest rates that have resulted from the concoction of events, financial speculation was one, trade policy and the weak dollar was another, a sell off Treasury securities by the NationsBank was a third, could be damaging.
>
> By restricting borrowing, the higher rates have the potential of taking more steam out of the economy than the Fed may have wished, greatly diluting an economic expansion that was so promising and powerful during the winter and now has lost some of its bloom.

And then the rest of this goes on to discuss primarily the financial speculation dimensions of the factors that may have led to your action. In fact, they even quote one person:

> I am an economist, and as an economist, I don't understand why interest rates went up so much.

As an economist, he ticks off reasons why the pressure among lenders for higher interest rates to fend off inflation lacks justification in the real economy with its stagnant wages and numerous companies that can't make price increases stick. He said, "I personally agree that the markets may have overstated the risk of an upsurge in inflation." But as a lender, he has added his voice to the hue and cry about inflation.

Then it goes on.

That brings us to this comment by the Chairman of Commerce. While we understand that today's moves are intended to calm jittery financial markets, we hope that Main Street is not being sacrificed for Wall Street. And, as I listened to your statement, a good part of it, beginning at about pages 5 and 6, and then running on from there, in fact addressed your concern about the sharp reactions in the markets and so forth and so on.

I guess the question is, to what extent are the traders in the markets driving the monetary policy in a way to address this speculation issue at a cost to the functioning of the underlying real economy?

I am struck it's like a casino. Every time a new figure comes out, we get all this movement. I mean they're waiting for the next figure, whether it's going to be the unemployment rate, consumer durables, the CPI, Producer Price Index, you get these figures that ought to be good news, and it's sort of bad news.

It's this cartoon here, the economy is picking up, we are doomed, so to speak. And you get a good piece of economic news for the workings of the economy for the ordinary person, for working people. You know, unemployment is down, you're getting some good growth, the inflation figures are good. Boom, off we go again.

Now, to what extent is this speculation? And you have to address it because it creates a problem for you, I take it, in the financial markets? But as this article suggests, causes for Fed policy of higher interest rates other than inflation concerns. Of course, you always articulate it very cryptically on an inflation basis, although your statement today, it seems to me, a very good part of it is addressed to this speculation factor.

Chairman GREENSPAN. Let me address that in several ways, Senator. In my judgment, I don't think the concern that the financial markets exhibit about inflation is something which is readily dismissed. They are appropriately concerned about the ravages that inflation can impart to the financial and economic system.

I must say that some of them may be overestimating it, some may be underestimating it, but I think that what we are looking at is a worldwide phenomenon where individuals who are quite sophisticated in knowing how economic processes look are evaluating various different policies which go on in not only the United States but also in a variety of other countries. And while I may not agree with some, I can't honestly say to you that I find that there's an irrational element in a number of these concerns.

There is a very important basis for it, which, indeed, is the reason why we moved in advance, because in our judgment, history tells us that the accommodative levels that we were at were unduly risking the emergence of destabilizing inflationary pressures.

What a number of people in the markets are concerned about is a resurgence of inflation and, indeed, the fact that long-term nominal interest rates are still well above where they were several decades ago is an indication that there is still a deep-seated concern about that. And the people who have those concerns are not traders or people who are speculating. These are people who run pension funds, these are people who have investment accounts which are employed for purposes of any number of things.

They are, indeed, the mutual funds which hold the assets of a very significant part of our households. These are not unsophisticated people who scare easily, who see ghosts of inflation in the closet. These are people who have lived through a long post-World War II period in which inflationary pressures eventually got out of hand and created some very serious damage to this country. And I think it's a mistake to dismiss views in the marketplace that are concerned about inflation as somehow misguided.

Senator SARBANES. Of course, if they hold the growth level down low enough, they, in effect, will give themselves as close to a guarantee as you can get against inflation, but the economy will pay a very high price for that.

Now, in a sense, from their point of view, it's rational to play the game that way but it's imposing heavy costs on the economy. I mean, if we grow at a very low rate, with unemployment not really coming down, the economy not really getting up to its potential, the margin on the inflation front is enhanced, which is what they want. But the costs that we're paying on the growth front and the jobs front, the costs that ordinary people are paying in terms of trying to advance their standard of living, I mean, I have these young couples coming to me. They can't buy a house now. They were about to buy a house; now they can't do it. The rates have gone up 1½ points, maybe 2 points and they are priced out of the market. They're just knocked out. Their opportunity to become a homeowner is gone, at least for present circumstances. There has got to be some balance in here. The Act under which you operate requires you to look at maximum employment as well as stable prices.

Chairman GREENSPAN. Absolutely, Senator.

Senator SARBANES. And to put the two together.

Now, obviously, these bondholders, if they can in effect put the pressure on for rates that give them a soft economy, they will enhance their protection against inflation but the economy and most of the public will pay a very high price for that.

Chairman GREENSPAN. Senator, I don't acknowledge that there is a difference between the goals of Wall Street and Main Street. Let me tell you why.

We're looking at a different time frame. As I said earlier, I would say the evidence is increasingly that low inflation means higher economic activity, greater growth in standards of living, and greater real wages, not lower.

The presumption that we used to have that there was a simple tradeoff in which we had to either accept a high unemployment rate, considerable slack in resources, if we were to keep inflation rates down, and the converse has clearly been significantly altered by the history of the last 15 or 20 years. I don't believe that one looks at keeping inflation down by suppressing levels of economic growth. What is the appropriate process is to try to galvanize productivity, because it's through productivity that we have the only way of enhancing living standards over a sustained level.

And to emphasize what you said, Senator, we are, in fact, required by statute to maintain a policy which, as I would define it, is to obtain the maximum sustainable, non-inflationary growth that we can implement. And I use the word non-inflationary because I

consider it a necessary condition to maximum sustainable economic growth.

So I don't visualize this view that there is a difference between Main Street and Wall Street. We're all endeavoring, to the extent I can speak for my colleagues in the financial system around the world, to find ways to get solid economic growth which is sustainable and which is not periodically upended by inflationary destabilizing bouts which create problems within economies and which have left us with very difficult problems of structural unemployment, and in some cases, problems with respect to income distribution, which I think the Chairman raised, with which I agree.

I think that productivity is a crucial question we have to focus on and I consider that the importance of keeping inflation down in order to implement that has got to be a major guiding element in policy, both from an economic point of view and from the monetary point of view.

Senator SARBANES [Presiding]. My time is up and I have to yield to Senator Sasser.

I just want to put a couple of items in the record, if I may. One is an article by Lester Thurow, "The Fed Goes Ghostbusting: Raising Interest Rates Is Killing the Recovery." The second is an article in Business Week—no, U.S. News and World Report, sorry, of May 30, 1994, entitled "Friendly Fire From The Fed: The Central Bank Aims At A Barely Visible Inflation Monster But The Shots Could Ruin the Economy."

Here you are up here in command of this tank shooting these shots which go right through this supposed inflation monster and are landing over here on the economy.

So it's a preemptive strike but not against inflation. Let me just read what this says, if I could, Mr. Chairman.

> Federal Reserve Chairman Alan Greenspan has launched yet another monetary missile. Last week, for the fourth time in 3 months, the Central Banker hiked short-term interest rates in an effort to blast inflation off his radar screen. But Greenspan's data detection system may be malfunctioning. His target, growing price pressure, is barely a blip and his latest salvo could eventually end up ruining American consumers and companies with the economic equivalent of friendly fire.

And it also says:

> Piloting the economy is even trickier today because Washington's fiscal policy is far more restrictive.

Then it continues about our efforts to reduce the Federal budget deficit.

Business Week had an article, "Why Are We So Afraid of Growth." In another round, I want to touch on that because this asserts:

> Conventional wisdom holds that the U.S. economy can't sustain rapid growth without inflation but that may be wrong. The reason a wave of innovation is boosting productivity while global competition is keeping prices down.

Then it elaborates on that theme inside.

Thank you, Mr. Chairman.

I thank my colleague.

The CHAIRMAN. Senator Sasser.

Senator SASSER. Thank you very much, Mr. Chairman.

Chairman Greenspan, you indicated a moment ago that bondholders were becoming apprehensive about inflation because they

have lived through a long post-war period, many of them, in which inflationary pressures were out of control.

If you look historically at some of the causes of that, we see that we had the two major oil shocks of the 1970's, the post-war period—after World War II—and we also fought two major wars: Korea and Vietnam.

Then we had the shockingly irresponsible fiscal policy that was engaged in the early 1980's, all of these highly inflationary pressures. None of those are present in the world in which we live at the present time. If these bondholders believe that, then they're like the generals who are always fighting the last war. The war is over. We now have a responsible fiscal policy. I would characterize it as even a contractionary fiscal policy.

There's no evidence of inflation on the horizon or over the horizon that I can ascertain. In your own statement, you say, sir, we initiated the removal of excess monetary accommodation without widespread indications that inflation had picked up. Then further down that paragraph, and you do have two minor justifications for raising rates, you say, but wage growth has remained moderate and unit labor costs well contained by marked improvements in productivity.

If none of these other factors—oil shocks, irresponsible fiscal policy, wars—if those things are not present, then many times inflation is led by wage growth which is not compensated for by productivity. That is not present here. So the question I'm coming to is on what do you base this assumption that there is some inflation?

Before we get to that question, let me ask you these underlying questions. What would you consider to be an acceptable rate of inflation, or is there an acceptable rate?

As I understand it, the Consumer Price Index, for the past 12 months, has been at 2.4 percent. Most economists are saying that the CPI is outmoded, and that it probably really over-estimates the amount of inflation. And I think that's what you said, Mr. Chairman, Senator Sarbanes prompts me. That the CPI actually overstates the rate of inflation by 1 percent to 5⁄10ths of 1 percent. If that is true, then we're sitting here at anywhere from a 2 percent growth of CPI to a 1.4 percent growth, and the Producer Price Index, over the past 12 months, has been down by 4⁄10ths of 1 percent.

Now, what would be an acceptable rate of inflation? What would be an acceptable growth in the Consumer Price Index? Are we shooting for zero inflation? Is that what we're trying to do?

Chairman GREENSPAN. First of all, let me just quickly respond to the question of the issue of whether inflation is specifically driven by wars or oil shocks or the like.

Clearly, inflation is driven to an extent by those two events, provided that there is a monetary accommodation of the particular expansionary forces which are involved with it. But remember that we're not looking only at American experience. We have extraordinary experiences which we can draw upon all around the world for a very long period of time. And it is quite apparent that there are inflations which take hold; in fact, the vast majority of inflations which take hold are not specifically related to these events.

They are essentially engendered by policies of governments which create inflationary instabilities.

Senator SASSER. If I might interrupt you, Dr. Greenspan, just to say, yes, I agree with that. I listed that as one of the indicators of inflation; irresponsible or overly expansive fiscal policy on the part of Government. And that's not present here now.

Chairman GREENSPAN. Let me address the question, and just essentially repeat what I've said in the past, with respect to the question of acceptable long-term inflation goals.

As I said before, it appears increasingly evident that the lower the rate of inflation, the higher the growth in productivity, and I want to repeat the caveat I made: This is a view which is still undergoing fairly extensive analysis and we don't have enough observations to know that it's conclusively the case, but I think it's becoming persuasively the case that not only is it important to bring the inflation rate down from 10 percent to 5 percent, which everyone agrees to, but it's increasingly becoming evident that the lower we get under 5 percent, the more stable and growing the economy is, assuming of course, that we're not going into a deflationary environment which creates a reverse set of patterns.

Senator SASSER. Some of us are apprehensive that that could occur.

Chairman GREENSPAN. I understand. Any central bank that does not keep that in the back of its mind is not doing its job. Obviously, we are aware that there are two sides to this question, and we invariably focus on all the various different types of scenarios which could arise, and on occasion, we look at this issue.

Senator SARBANES. Some of us want you to keep it in the front of your mind, along with the other thing that you're keeping in the front of your mind. They are both there together.

Chairman GREENSPAN. I would say it is in the front of our mind. But let me just repeat, it's very difficult, in looking at the data, to get a judgment as to where the appropriate inflation rate is.

I said, over the long run we look toward establishment of price stability. And I define that, as I have in the past, as a condition in which concerns about future inflation do not materially affect the decisions that are being made in an economy. The reason I say that is that there are differences in the way we measure inflation.

Indeed, Senator Sarbanes is quite correct when he points out that you probably do get a better measure of economy-wide inflation with this chart by looking at the domestic purchases, that price index which picks up more of the computer price declines which are part of our price system, and I think appropriately measured. To that extent, I think it's a superior measure to the Consumer Price Index, which only captures part of the economy. But because these data have got lots of biases in them, we have to try to sense where we are heading with respect to the long-term goal of price stability by judging how it impacts in the system. And I would say to you that when we are involved in trying to find the appropriate balance, we're not fixed on a specific number. I just don't think that would be appropriate.

Senator SASSER. My sense is that if we could just stay where we are, with regard to the rate of inflation, or the Consumer Price Index, and have sustained economic growth that's going to be cre-

ating jobs and allowing the economy to expand and allowing productivity, the rate of productivity to increase, I think we're doing fine. I don't see the reason for trying to tighten down on the monetary policy.

Let me ask you this question, Dr. Greenspan. What do you consider to be or how fast can the economy expand without igniting inflation, in your judgment?

Chairman GREENSPAN. That obviously is a problem which is the focus of an awful lot of economic resources in a lot of places.

I'm a little bit uncomfortable with a rigid formula which specifies basically how fast we can grow over the longer term. One of the reasons is that while we can arithmetically demonstrate that long-term growth is essentially, with a few minor differences, the product of the rate of change of labor input and productivity, and we can be within some reasonable surety that the labor input, over the long run, is reasonably easy to forecast since most of the people who are in the labor force and will be in the labor force 10 years from now are already born, I don't think we've got that much of a hold on what the productivity numbers are as far as the longer term is concerned.

Indeed, as in that Business Week article which Senator Sarbanes held up, I think I'm quoted there discussing some of the issues of the changing technologies that are going on which seem to be significantly augmenting our capability for long-term growth.

That type of technological change, in conjunction with low inflation, I suspect may give us a higher rate of productivity growth than I think most of the standard analyses now suggest.

As far as monetary policy is concerned, we are not and should not focus on trying to constrain the economy to a specific growth rate. What we try to do is to implement a policy in which whatever growth is emerging is balanced. And if it is balanced and the financial system is balanced, whatever growth falls out of that relationship is what monetary policy should sustain.

To assume that we know what the future, the next 6 months, 9 months, 3 years, of productivity growth is going to be, is stretching the resources of our insights beyond where I think we can conceivably go.

Senator SASSER. I couldn't agree more, Mr. Chairman. But my concern is that we're stretching our insights too far now in anticipation of inflation for which we see very little evidence.

I know my time has expired, and I'm about to stop, Mr. Chairman. But we're sitting here with a situation in which the CPI, the Consumer Price Index, inflated at the rate of 2.4 percent over the past 12 months. We think a more accurate measure of that would probably be less than 2 percent. The Producer Price Index declined, as I said earlier, by 4/10ths, declined by 4/10ths of 1 percent over the past 12 months.

Productivity growth over the past 4 quarters was 2.6 percent, outstripping the CPI. Unemployment stands now at about 6.5 percent. I think, under the new measurement, it's about 6.5 percent. And we know that's not a reasonable measure of the true unemployment because we have got people out there who are working part time, who want to work full time. We have got people who dropped out of the work force because they can't find jobs, and a

more true measure of that unemployment rate is going to be considerably higher than 6.5 percent.

Now for us to be sitting here with 3 percent real growth I think last quarter, and the projections for no more than 3 percent on out into the future, and when you subtract from that the growth of the labor force, you're actually getting real growth of about, what, 1.8 percent?

For us to be sitting here worrying about inflation with that staring us in the face, to me, it says the Fed is just like the Newsweek magazine says. It's afraid of growth. My concern is that I face these people every day who say, I want to buy a house and I can't. Or I want to expand my business and I can't, because of rates going up. And we can have these cerebral discussions here, but what are we to say to these people?

I want to get this country and this economy back where it was in the early 1960's when we really had sustained economic growth. People had hope, people had optimism, and I don't think we're going to be able to do it with this restrained and what I see as restrictive monetary policy that the Fed is following.

We have got a basic disagreement, Mr. Chairman. I don't see the inflation, and I'm willing to run a tiny little risk just to get some orders of robust economic growth going here, not putter along indefinitely at 3 percent, 2.5 percent, with high rates of unemployment.

So, there are my thoughts. I believe, we just have a basic disagreement, Mr. Chairman. I've come to that conclusion.

Senator SARBANES. Mr. Chairman, could I just add to that?

The CHAIRMAN. Briefly, and then we'll go back around.

Senator SARBANES. I think Senator Sasser is absolutely right. What has happened is you are pursuing a policy, and when you try to relate it to facts, to indices, to measurements, we can't understand it.

In other words, you say, we're trying to fight inflation. We look at all the inflation figures and they look very good, the best they've been in 30 years. Then you say, we're trying to anticipate an inflation problem. Well, perhaps. I mean, we don't know that. You may be over anticipating it and costing us economic growth as a consequence.

Then we ask you, what economic growth figure would cause you to get concerned. Well, we don't want to get tied to an economic growth figure. How do we work through all of this? In other words, we get some economic growth. It looks like a healthy rate, and you say, we're going to get an inflation problem out of that, even though the inflation problem has not yet emerged. So you cut down on the growth. Now, how do we know that you're cutting the growth at a point where it in fact would contribute to inflation, rather than at a point where it would not do so and we could get the extra growth?

This cover story here says the U.S. economy has expanded at a 2.4 percent annual rate since 1980. Most forecasters figure that the economy's growth potential is 2.5 percent at best, but the evidence is mounting that it could be as high as 3.5 percent without touching off inflation. And of course, the extra point would make an

enormous difference to the economy and to the standard of living of the American people, just an absolutely enormous difference.

Chairman GREENSPAN. I agree with you.

Senator SARBANES. You've come along. The bond market went down today because they revised the growth figures from 2.6 to 3 percent in the first quarter of 1994. I mean that should be good news, not bad news. In a sense, we're being driven by people whose perception that serves their particular interests does not square with what may serve the interest of the overall economy. You're not giving us something we can look at and say, yes, there's a problem there, and explain it to the people.

Most people are saying, look, there's no inflation problem. Unit labor costs are very good. Why can't we have some good growth for awhile in the economy? Why are we taking these rates up, slowing down the economy, and making it impossible for me to buy a home, creating a problem on reducing employment?

I think what's happening is the economy is being held to a subpar level in terms of growth and jobs, which has enormous ramifications for the standard of living and for addressing the problems, for example, of the urban areas of our country, all of which is designed to provide an extraordinary margin against inflation. It seems to me that there is increasing evidence, and I think the Fed ought to be explaining that to the country, saying look, we can have some good growth for a period of time without an inflation problem, instead of buying into the notion that as soon as you get some good growth, you've got to move to cut it down because there's some phantom inflation that you perceive that needs to be addressed, when the underlying figures don't support it.

Thank you, Mr. Chairman.

The CHAIRMAN. I'm going to start the time clock again here. I want to follow on with that.

It's quite unusual for us to have be released a policy bulletin from the U.S. Chamber of Commerce because normally the U.S. Chamber of Commerce, I think it's fair to say, would tend to be supportive of Fed actions, not always but generally so. The fact that they put out a policy statement that they're really concerned about what you're doing, I think is significant. I'm less surprised to see the one from the AFL–CIO because they're feeling the job pinch in their area, so they're highly sensitive to this issue.

But to have the business community concern, I asked a question of the staff. They put this out after your last move. They did not put it out after the three earlier adjustments upward, as I understand it. But this is what they say here.

We understand that today's moves were intended to calm jittery financial markets. We hope that Main Street is not being sacrificed for Wall Street, but down in the guts of it here, they point out that they don't see the inflation either. They see economic growth slowing down, and they say, quote:

> We are becoming increasingly concerned that Federal Reserve policy may be moving too fast and too far. We are concerned that monetary policy not choke off an economy that only recently has begun to generate more income and job growth.

Now, this isn't Paul Sarbanes speaking, this is the U.S. Chamber of Commerce.

The fact that their members would be giving them feedback and coming up through their operation and causing them at the top to sit down and make a policy decision, just like the Federal Reserve sits down and makes a policy decision, that the U.S. Chamber of Commerce would sit down now and put this out as of May 17, 1994, indicates that they are concerned and that they are asking you—they are not asking you to undo your policies, they are asking you to pause here and let's see how this is all going to work before we tighten things down too much and perhaps snuff out this recovery.

I'm not saying we ought to take them as gospel but I think it's significant when the Chamber of Commerce has enough of a sense of apprehension that they make a public statement to say, all right so far, but let's not continue to do things here that might choke off this recovery. I think that's significant. That doesn't mean that they're right and you're necessarily wrong, but I think it means that the apprehension level out there has really grown.

Now, I want to bridge that back over to the issue of the financial markets and the speculation that was building up out there, part of which, according to your testimony here today, has been dealt with; not all of it, some of it.

I'm concerned about the derivatives problem. I've read your statements about it. I have some concern about it in terms of the leveraging, the way it works, and the degree to which it may, because of its rapid development and the way that whole system functions, that you could have a situation where you have your normal elements of systemic risk and you bring this in as an additional element. I think it adds to systemic risk, particularly if you have an extraneous event strike.

If you have a lot of derivatives activity going on out there, you get an awful lot of traffic in a hurry, more than maybe you can handle, maybe more than the market can process, the clearance process can handle, and you could have a systemic risk problem increase as a result of that.

I'm going to ask you your own view on that in a minute.

I know there are proper purposes for hedging and for derivatives in terms of individual transactions. I'm talking about the fact that we're talking about a worldwide market and so forth.

My sense for it is that much of the activity in the derivatives area actually relates to long-term bondholdings and a lot of the traffic, especially if you're going to get severe volatility, handling that and clearing out positions can route a lot of traffic in a hurry through the long-term bond market. That's a matter of concern to me. I hope it is for you, but I'll let you speak to that.

I think that may be part of our problem here in terms of why we're getting some disconnect between how markets are working, financial markets which are now global, and this underlying real economy. We may be getting an unusual degree of amplification over into the market trading system from events that are really much more benign than the reactions in the market might seem.

Now partly it's because the policy direction has changed and interest rates have gone up a fairly significant amount in a short period of time. And so anybody that got trapped off base with an interest rate expectation, which you talked about in your statement,

and a position could find themselves in a place where they could lose and did lose an awful lot of money. If they don't go ahead and square their positions out then, they could lose even more money and perhaps even be wiped out it appears to me.

I don't know anybody that I have confidence in that knows everything about how the derivatives market is structured today globally and how it's playing its way back through the market system and how it's affecting these interest rate gyrations. But there's enough evidence there for the naked eye to see that there's a relationship. And it's a matter of concern to me because I think it may now be impacting the strategy that you're talking about.

If you were to take all of that out of the picture, I think what you've said, in terms of your view of inflation fighting, looking backward and forward, takes on one meaning. I think if you introduce all that, it takes on a somewhat different meaning, especially because you've chosen, in your statement today, to lead off with a pretty direct commentary about expectations in financial markets and some of the problems that were out there. I'm struck by this fact. Despite the fact that you've increased interest rates now 1¼ percent, futures markets, the prices there suggest that investors are anticipating that short-term yields will rise by an additional 1.5 percentage points by next March, and another percentage point over the following year.

You were talking about futures and options earlier in your comments. I'm struck by that. I'm struck by that in the sense that pricing trading data out into that world of future expectations tells me that something is different, something is not the way it was before.

In fact, you've said that to us other times. You've come in here, not just on this point but on the broader point, to say that the world of finance and economics has changed in many fundamental ways, and you can't necessarily guide by the old markers that we had in years passed. I mean, that's a paraphrase but you've said that any number of times here.

So I want to go through two or three questions to get right to this point. Do you think the growth of derivatives on a global basis, the way they have, has added in any way to systemic risk?

Chairman GREENSPAN. In one sense it has, Mr. Chairman. Remember that the reason why there's been such an extraordinary expansion in derivatives is, one, obviously the technology, which has enabled them to be employed in a useful manner in the world financial system. But more importantly has been the demand that end users, people who are involved in portfolio investments around the world, seek ways to reduce their risk—to effectively unbundle risks in the system in a manner which individuals who are willing to take those risks can take them, and those who wish to eschew them can do so.

What that tends to do overall, obviously, is to improve the efficiency of the financial system, and things happen more quickly because of that. Indeed, as I've said elsewhere, derivatives essentially arbitrage the primary markets around the world, pull them together.

What that means is that if an unrelated event occurs, a major dealer in stocks or bonds has a very huge loss in the primary markets, the so-called plain vanilla type of activities, the capability of

that horrendous problem escalating throughout the financial system more quickly than before is clearly there as a consequence of the improved efficiency.

We can go back 150 years when the efficiency of the financial system throughout the world was minuscule in proportion to what it is now; communications weren't all that good.

It meant that if an investor in New York and a bank in London, for example, were to become insolvent because of a loss in London, he wouldn't know of his insolvency for a couple of weeks. It would take that much time for communications. The system worked much more slowly, much less efficiently, and, indeed, contributed less to economic growth in real terms.

The system we have now is a much more high-powered system. It is one which is contributing clearly to a higher level of economic growth and productivity, but it does obviously have risk characteristics, because it is enabling the system to adjust much more rapidly, and that is true obviously of benign forces as well as malignant forces.

If you get the economy moving much more efficiently, you also get crises moving more efficiently and in that regard, I would say there is an element of increased systemic risk.

One of the reasons why, for example, we bank regulators have escalated our valuation of this increasingly more sophisticated global financial system and tried to look to the future of how supervision and regulation would be appropriately initiated is precisely because we see that there are increasing risks because of the globalization and the rapidity with which these markets are moving.

There is no way to turn back the clock, there is no way to turn back technology. What we have to recognize is that this is the world in which we deal, and we have to make certain that our supervisory and regulatory policies reflect that, and not try to have a nostalgia which you'd look back 40 or 50 years ago, when things were moving a lot more slowly, and wouldn't it be nice for central banking supervision to have that kind of environment? The answer is, yes, it would be but that is not what the options are in front of us.

The CHAIRMAN. Did you expect the long-term rates would react as they have when you made these adjustments in short-term rates?

Chairman GREENSPAN. No. We had the expectation that, as in the case of the past, where moderate growth was involved, long-term rates would adjust upward, and then stabilize or come down because our view at the time when we moved was of an economic environment which was considerably less buoyant than is materializing.

The CHAIRMAN. Are you saying then you think the reason the long rates are higher is that you were just off on the buoyancy expectation?

Chairman GREENSPAN. I would say that there are two issues. One, the major issue unquestionably is the fact that there has been an upward escalation, not necessarily of the average expected growth rate, but a view that if the forecasters are wrong, they are more likely to be wrong having underestimated growth. I think that has been a major factor which has been embodied in long-term

expectations. And as far as I can judge, it's the major element which has created a significant rise in long-term rates. Second, embodied in that is the expectation that, as a consequence of the stronger economic growth, credit demands and other demands of an inflationary nature will emerge escalating inflation expectations. It's very difficult to separate these two, but it's clear that they are part of the whole process.

The CHAIRMAN. I'm going to yield here in a moment.

Let me tell you a concern I have, and I'm trying to fathom this in these new developments just as you are and just as everybody else is. I'm struck by the amount of activity in the world of speculation and leverage and trading that now involves, in some part, holdings of long-term bonds and debts on long-term interest rates which I think was building up over a period of time, keying off this very misleading set of expectations that have developed and that you cite on page 4 of your testimony.

A lot of people, even sophisticated people, were coming to think that we were going to be in a long-term low-interest rate environment, and the Fed had, in a sense, had an overly accommodative policy to try to get the economy going and prepare balance sheets, that people started to take that for granted, and may not have thought that there was going to be a change. Then a change came. Some people got caught off base. Some people lost a lot of money. There have been enormous losses among bond traders and others who were sort of levered off that. And I think we've seen unusual volatility in that market as a result of this.

I don't know if it is as much as you expected or more than you expected. I think it is more than a lot of people expected and I don't think it's fully played out yet. But to the degree that that is so, I think you have now embedded in long-term rates and the volatility and the daily trading action on long-term rates, an element of market force that in a sense is unrelated to these other, more traditional long-term inflation evaluations.

That it's driven more by traders, by leverage, by positions, by currency values that may be in a derivative position against a U.S. bond or a bond from another country, and then all of a sudden, when these things start ricocheting around through this real-time system internationally, you can start to get an element of activity which is speculative trading activity showing up in long-bond rates that really is separate and apart from these more measured, sophisticated efforts to try to guide monetary policy and economic growth policy over time in a non-inflationary way.

Now, I'd like you to react to that. Do you think I'm correct in noting that there's an element of that out there? If so, I think we need to talk some about that.

Chairman GREENSPAN. There's some but it's easy to exaggerate, Mr. Chairman. Let me say that markets have always been volatile, and we've been through a period in recent years, prior to earlier this year, where the degree of volatility coming off the 1987 stock market crash was remarkably narrow.

Even with the increased technologies, we were beginning to see a narrow range of fluctuation. And with the advent of more sophisticated options in these markets, we were able to infer the degree

of expected instability that the markets were trying to ensure against, and they were quite modest.

The change that has occurred recently is a one-shot event. It's a discontinuity in the structure which happens periodically. I would not presume that the degree of fluctuation and instability that we've seen in recent months is, in any way, a normal phenomenon. At some point, it clearly will settle down, but I doubt very much that the normality was the earlier period.

I don't expect that the current period or the most recent period has been normal either. But I do think we have to remember that very important lessons and actions were taken as a consequence of the 1987 stock market crash.

One thing we learned of considerable importance was that unless the primary markets have adequate capacity to take these big volumes of movement, you get very severe market responses.

All of the markets that were under strain on that famous day and the following morning have very significantly increased their capacities to handle very large transactions. The amounts of funds that are moving through the international system at this particular stage are truly staggering. They reflect, to a large extent, the improved technologies which enable these systems to work.

And while you do get a sense of future shock from some of this, especially looking at the numbers and the trends, when you look at it closely, it's clearly there because there is a demand for that.

The CHAIRMAN. I don't think there's any question about the demand. The demand is borne out by the activity. The question is: Is the structure of that activity and the stability of that system and the degree to handle, bursts of activity, especially if you get some other severe event that comes in, do you have the clearance mechanisms? Can things be unwound quickly enough?

You are right, when you made the point earlier that sometimes people in days passed had a long period of time to clear out these positions, and now you've got to clear out by the end of the day in many of these instances. I don't want to see a cardiac arrest here, because we're into future shock and we've gotten there too fast.

I think we are seeing some of it in the long-bond market. I gather you are saying you think there's some of it, but you are saying it's easy to exaggerate that.

Chairman GREENSPAN. Yes.

The question you raised with respect to settlement and clearance systems is the correct one. Ideally if you want to reduce systemic risk, you do a number of things, and there are certain technical things you do. And one of the things we've been pushing is the so-called bilateral netting agreements which significantly reduce the exposure of counterparty risk.

We have done that. And, indeed, this Committee has been quite helpful in the legislation which has enabled us to get a legal structure in place in the United States which enables that to occur.

But also there is a considerable amount of effort to reduce the degree of float in the system—more specifically, the time lag between transaction settlement and clearance because there is a technical problem that, in the event of a crisis, if you have transactions in train and not completed, there are obviously greater risks.

We used to be terribly concerned about so-called Herstatt risk which was something that never dawned on us back in the seventies, that is, that you could have such a dramatic effect because of the timing differences in the way clearances occurred.

But there's a great deal of effort involved in the agencies, the SEC, ourselves, and others, in trying to eliminate a lot of the structural problems that exist in the settlement and clearance systems because if you are to deal in this global financial system, which is extraordinarily complex, you want to make certain that the vehicles which handle it are functioning effectively.

So I take what you're saying as an important concern on your part because it's very difficult not to be concerned when you see this extraordinary amount of activity going on and you are not certain that it is being effectively controlled or stabilized.

As I said on Wednesday before Mr. Markey's Subcommittee in the House, fortunately, what we are seeing is a concern on the part of a number of counterparties in the derivatives area and in other areas of the system. A concern that they have adequate knowledge of what people's balance sheets are and what their credit exposures are. The consequence of this is, in a sense, a very considerable amount of increased private regulation that's going on because it's the self-interest of all of these people to make certain that the people with whom they deal are solvent, sound, liquid, and a whole variety of other characteristics which are involved in this type of process.

I think we have got to, and indeed, I hope we have, escalated our regulatory awareness of this whole area a couple of notches. As far as we at the Fed and the other banking regulators are concerned, we see the necessity of encouraging the enhancement of the risk-management systems of individual firms so that they have the capability of really being far more sophisticated than we can be.

And we consider that our job is going to become increasingly to make certain that they have those systems in place and a risk management system in place which does not create systemic risks for everybody else.

The CHAIRMAN. But the mechanics and the clearance process and avoiding the cardiac arrest problem really have to look to you and others who are in the regulatory side to see that the mechanisms are in place. G.E. or anybody else isn't competent enough to be able to understand whether the structure will hold up under heavy weather.

It would be one thing to think you're in fine counterparty trading arrangement and then find that the whole system can't sustain itself. I think this is a matter of some risk to us and I think we're beginning to see some of the gyrations of it here.

When you change policy direction, and you caught a lot of people off base, people who are highly leveraged in these hedge funds and so forth, you saw a lot of it played out in bond volatility. You don't have to be a genius to see that. I think everybody sees that that follows the markets. So that's part of what you have to deal with, part of what we have to deal with, and it may, in fact, end up affecting our economic prospects.

Interest rates, in fact the loan rates, may be somewhat higher as a result of this. I hope not. I hope we're not going to be into that situation. I know you're inclined to discount that.

Chairman GREENSPAN. I am.

The CHAIRMAN. But I'm just not fully convinced on that issue at this point.

Chairman GREENSPAN. Let me just say, Mr. Chairman, I think you're raising quite important issues and we take that to heart. It's crucial that we not just sit back and observe this phenomenon but try to understand it as best as we can, understand the potential risks that could conceivably emerge, try to get legislation where we need it and which is helpful in the legal area, and try to make certain that we harness some of these processes in a manner which will contribute to increased stability, economic growth, and risk diversification over the longer run. It is not easy but I do think that it's something which we all take as an important mandate from the Congress.

The CHAIRMAN. Senator Sarbanes.

Senator SARBANES. Thank you, Mr. Chairman.

I just have a couple of areas I want to ask about. First of all, to follow on, do you have any sense there's a dynamic at work where the bond markets keep betting on the Fed will take rates up and, therefore, create a dynamic which leads the Fed to, in effect, have to take rates up to respond to this expectation?

Chairman GREENSPAN. No, Senator, I do not.

Senator SARBANES. So you have no sense that you're being constrained by expectations of the bond market in making your policy decisions?

Chairman GREENSPAN. We are obviously aware of what's going on in the markets and we clearly tailor our policy to what's going on in all aspects of the financial markets. That is what a central bank has to do. But if you're saying to me that our actions are being driven by the financial markets, I would say no.

Senator SARBANES. Well, it's an interesting subject to explore, I think.

Let me ask you this question. Do you think that the economy could grow at something close to 3.5 percent without kindling inflation?

Chairman GREENSPAN. I think it's possible. I don't know the answer to that. You asked me whether it is possible. The answer is, yes, I think it is possible.

Senator SARBANES. Now, my next question is, there's a general view that the Fed has targeted a growth rate of about 2.5 percent. That's the generally held view. Is that correct?

Chairman GREENSPAN. I think that is a correct statement. That is the view of where they believe the central bank of this country is focused.

Senator SARBANES. Is that where the central bank is focused?

Chairman GREENSPAN. I cannot tell you the particular motives of the individual members of the FOMC when they vote. My impression is it's far more sophisticated than that. They would probably agree, at least many of them, maybe most, that it's a far fuzzier issue than some rigid number, which presupposes a forecast of productivity trends which are not all that easy to forecast.

As I said before, I don't think that we focus policy on trying to constrain, as some of them put it, economic activity to a certain level. What we try to do is observe the structure, the balance within the economy and the dynamics within the economy and try, in the context of maintaining stable financial conditions, to enhance growth in a manner which is the maximum that can be sustained, and I emphasize the word "sustained," over the longer run.

I don't know what that number is. But I do know that if we were to basically say that there is a certain number which we would push to keep the growth rate down, I would say that's poor monetary policy.

Senator SARBANES. Why wouldn't you let that number get up as high as it could be without resulting in an inflationary problem? You would, would you not? Would you not want a growth number as high as you could get it without it resulting in an inflationary problem? Can we agree on that?

Chairman GREENSPAN. Yes.

Senator SARBANES. Now the difference between 2.5 percent growth and 3.5 percent growth really for the American people is the difference between a steadily rising living standard and stagnant ones.

Chairman GREENSPAN. I will grant you 1 point is a big difference over the long run.

Senator SARBANES. That's right. It can make an enormous difference.

Now, I was discouraged, I must tell you, by the testimony earlier today where you went through the kind of litany of why you think people should be worried about inflation. Because it seemed to me, what would be the problem with the Fed enunciating this sort of position?

First, we think that the Congress has put a fiscal policy into place that is the appropriate fiscal policy and is, therefore, a constraining element on the economy. We want the economy to grow. We think the economy can sustain some good growth over a period of time without leading to an inflation problem.

It's our intention to pursue a monetary policy that would accomplish that, would not therefore lead to the sort of responses that I've been quoting to you from many, many sources, and the fact that we now have the Chamber of Commerce and the AFL–CIO in the same boat. That doesn't often happen around here. And they're now shipmates on the same ship in their responses to your policies. But it seems to me, at some point, you've got to start getting across to these highly volatile markets that we can have good growth over a period of time. It won't lead to an inflation problem.

If we're cutting it too close and we see that the growth is leading to an inflation problem, we will move to restrain the inflation problem. But, as Senator Sasser pointed out, it is impossible to explain to people why the growth ought to be slowed down, as you are doing, without any evidence of an inflation problem. In a sense, you're striking in the dark. You may be slowing growth down and costing us production and jobs and employment that could, in fact, be absorbed by the economy without an inflation problem.

Chairman GREENSPAN. I see no evidence of that, Senator. In our judgment, what we're looking at is an economy which is moving at

a fairly respectable pace. It's balanced. It strikes me that it could go on for quite a long period of time provided that inflationary imbalances don't emerge in the process.

Senator SARBANES. I know. But you see, the rate at which it is doing that may be well below what the economy could do, and, therefore, is costing us that production and that employment.

You took the rates up in February off of a 7 percent fourth quarter in 1993. Everyone said, oh, look, we've got this huge spurt of growth. We're going to have a big inflation problem. And the alarm bells went off. No one said, as everyone was predicting, the growth rate is clearly going to come down in the first quarter of 1994.

There were special factors at work in the last quarter of 1993 that gave you that growth figure. The growth figure did come down in the first quarter of 1994 now to 3 percent.

So it seems to me that we need to have a period of some sustained growth for a period of time to get the benefits of that out into the economy.

Chairman GREENSPAN. We expect that to happen.

Senator SARBANES. At what rate?

Chairman GREENSPAN. I don't want to give you numbers. I will give you numbers when I'm back here with the Humphrey-Hawkins testimony when we will have the full presentation.

All I will say to you is that our particular view at this stage is that the economy is doing well and that our concern is that we allow productivity growth to accelerate to the best it can because that's the only sustainable element within the system which enables growth to be maintained in a real sense.

I don't envisage that keeping inflation under control is antigrowth. In fact, I'm arguing strenuously today that I think it's a necessary condition for the sustaining of the type of growth which, unless I'm mistaken, I hear you arguing for and I'm not trying to disagree with.

Senator SARBANES. No, no, no. That's not the issue. The issue is whether to provide absolute or close-to-absolute protection against an inflation problem, a potential inflation problem, you are going to hold growth down to levels below what might otherwise be achieved without giving us an inflation problem, and therefore, cost us jobs, cost us production, cost us growth, cost us lost output. That's the question.

Now you have to make some judgments about at what rate the economy can grow, you have to address very seriously, I think, this article, "Why Are We So Afraid of Grow?" and that the evidence is mounting that it could be as high as 3.5 percent without touching off inflation.

Here's what's happening, Mr. Chairman, as I perceive it.

You are eliminating the intermediate step in judging whether to restrain inflation between growth and a rise and an effect on inflation or a movement in prices. In other words, you're not getting growth and then the growth begins to get translated into price increases, and at that point, you point to the evidence of price increases and say, well, now, we want to start pulling back on the economy because we're starting to get an inflation problem. You're moving without that evidence, so you're moving off of the growth figure itself.

What that means is that every time we get some good growth, the economy comes up out of the water to catch its breath, you push it right back down again. And we never are able to work out whether we can have a higher level of growth than people have been assuming.

They're assuming the 2.5 percent figure is not a good growth performance. A 2.5 percent growth figure is not going to get at the unemployment problem and it's not going to get at realizing our potential and it's not going to get at solving the major shortfalls in the economy of the country.

So you're getting caught where you're responding on the monetary policy side to a growth figure without the growth having been translated into an inflation problem.

Chairman GREENSPAN. Senator, I would say that looking at the history of this country and other countries, that if inflation reemerges in this country, I think we will end up——

Senator SARBANES. I am not positing that inflation is going to reemerge. I'm trying to deal with the situation, the basic question is whether we can have more growth than, in effect, is assumed or than, I think the Fed is giving without a significant inflation problem. And you're acting in a way that will never enable us to know the answer to that question because you won't let the growth carry on in order to see whether, in fact, 3 or 3.5 percent growth begins to give us an inflation problem, or whether, in fact, as this article suggests, we can have that kind of growth without inflation, because you're moving ahead of that.

Chairman GREENSPAN. First of all, let me just say that the 3.5 percent figure would be an extraordinary rise in productivity. If it occurs, in my judgment, it will occur because inflation has been kept down.

My concern is, and I think the market's concerns are that when growth occurs, and you begin to get, as a consequence, credit expansion and the types of imbalances which historically have tended to characterize in these types of situations, you tend to get inflation moving up.

The reason why people have been putting their money into instruments reflecting an expectation of increased inflation, which is what they have been doing, is because history is very persuasive on this issue.

What we are trying to do is to effectively remove the type of inflationary processes which inhibit growth. We're not against growth. On the contrary, that's precisely the reason we're endeavoring to do this.

Senator SARBANES. For years, we were told that if you want to bring these inflationary expectations under control, and if you want to get a monetary policy that will provide impetus to the economy through low-interest rates, do something about the Federal budget deficit. You've sat at that table many times and made that very point, correct?

Chairman GREENSPAN. Correct.

Senator SARBANES. Correct.

Well, we've done something about that.

It's a different, an important different element in the economic policy mix. Yet it's not being given a lot of weight. And we're right

back now in a situation where, with a constrained fiscal policy, we're now getting a constrained monetary policy with the danger of the impact of that upon the economy, and the ordinary people are being hit and hit hard by this. I mean, these increases in interest rates are not an academic exercise. They translate into real terms for ordinary people.

The banks took the prime rate up immediately. Small businesses get hit with it right away. Consumer costs are going to get hit with that right away. We've had any number of stories now about people being priced out of the housing market. We have some concern it's going to start affecting auto and truck sales. They're now paying higher interest rates, so all of these carrying charges for the ordinary consumer have gone up, constraining their economic situation. They have a real impact on people. I mean, the people who are going to buy the home now can't do it. The people who are going to build the home now don't have the jobs.

I'm deeply concerned about the economic impact of this on the broader economy, and it's a concern that's obviously broadly shared; it's not unique to us here in the Congress. As I said, the Chamber of Commerce and the AFL–CIO have gotten on the same boat on this particular issue. The homebuilders, of course, are beside themselves, small business people, and we've got a lot of good, knowledgeable commentators who are raising very serious questions about what the Fed is doing and what its' impact is going to be on the economy.

Well, Mr. Chairman, thank you very much.

The CHAIRMAN. I think it's important that we have this kind of a discussion today because the sheer act of changing direction in monetary policy, going from what you've described as an overly accommodative policy for a period of time, to bring it back, as you would describe it, to neutral is a change in the signal and people react to that.

And I think, in fact, that has in part set off in the minds of some a fear of inflationary expectations. In other words, you can say that you're doing it even though you're not worried about inflation right now, and it's not in reaction to an inflation that's peering in front of us. But I think to a lot of people out there who don't follow the subtlety of that message, when they see you changing direction, they assume that there must be some buildup of inflationary pressure, there's some ugly surprise coming and the Fed has data that tells them that, so they're getting the jump on this, and, therefore, we'd better go out and react to a problem that really is there; we just don't see it yet.

Senator SARBANES. Mr. Chairman, would you yield on that very point?

The CHAIRMAN. I will briefly, then I want to get back to it.

Senator SARBANES. The homebuilders, when they testified, made this statement precisely on that point, and I'm quoting them:

> We also feel that the Federal Reserve assiduous search for inflationary pressures and inflationary expectations and the Fed's insistence that the problems are developing, despite a glaring lack of evidence, are actually feeding inflationary expectations, and are also convincing the markets that the Fed has decided to continue tightening monetary policy regardless of information available to Congress, the Administration and the general public.

The CHAIRMAN. I think today's discussion, if anybody will take the time to watch it on C–Span or to read what you said, I think it's quite clear that you have not found, the Fed has not yet found this buildup of inflationary pressure. It's not happening in real time to any degree worth talking about. I don't want to get stuck at great length on it, but is that a fair statement?

Chairman GREENSPAN. I think that's a fair statement. We want to make certain it continues.

The CHAIRMAN. So you've adjusted your policy for other reasons. If somebody is attributing to the Fed some secret knowledge that you have seen ahead of time a huge burst of inflation, that would be a false reading by them.

Chairman GREENSPAN. That is correct, Mr. Chairman.

The CHAIRMAN. I think that, by itself, may be helpful, at least in the minds of some.

What I'm most interested in, and what I'd like to finish up with, and you can't speak for the rest of the members of the Fed or for the Open Market Committee, but have we adjusted enough here now? Can we expect that, for some period of time, at least for several weeks, that we've essentially gotten this job done and that we're not going to see another tightening operation here that's going to slow things down even more?

Chairman GREENSPAN. Mr. Chairman, I can't really go beyond the statements that we made when we moved on May 17, 1994. Part of what I said is, and I quote:

> The Federal Reserve will continue to monitor economic and financial developments to judge the appropriate stance of monetary policy.

That may not be saying much, but that's what we plan to do.

[Laughter.]

The CHAIRMAN. One of the things I've tried to do today, and I listened very carefully to every word that you both wrote and said, to see if, in what you were presenting, there was the basis in observation or information that would warrant further tightening steps from this point.

Unless I missed something, I didn't see it or read it. In other words, if there's a body of information that's relevant and important that we ought to be thinking about in a public sense, not just behind closed doors somewhere, but on a matter of this significance to the country and every citizen in the country, if there is a continuing keen concern and problem here, either having to do with false expectations in the financial markets which you say now you think you've essentially gone quite far in dealing with, or in the buildup of inflationary pressures, or people who are getting faked out and thinking that they're coming when, in fact, they're not, it looks to me as if, with the four steps you've taken here, you've really dealt with that.

Now, if there's something more that we need to know about that you haven't mentioned or hasn't been illuminated, that we need to be worrying about beyond what you've mentioned, and presumably we've already in a sense taken steps to deal with, I think you have to give us some sense of that.

Chairman GREENSPAN. I've tried to explain, as best as I can in the formal remarks and in the questions here, what we're up to and what we're trying to do.

I don't know if I can proceed very much——

The CHAIRMAN. Well, I think there are a lot of people in the country, and I don't leave us out of it for the moment up here, we're trying to speak for the people who send us here, but I'm hearing from an awful lot of people across the spectrum, from major company leaders to small business leaders, to citizens, to serious economists across the spectrum politically who really feel that because there is so much that's changed that it probably would be wise here to let us digest these changes that you've set in motion. Let them settle out a bit. Let's let the economy breathe here and absorb the change in signals and circumstance, and see what develops before we continue to bring the hammer down with further rate increases that we know, in fact, will slow the economy.

Now, it's a judgment call and you have one vote and one voice. You have the biggest vote and the biggest voice in that decision, but I'm struck by how many serious people, and I'm not talking about the traders; I'm not just talking about the Wall Street crowd, who have gotten themselves into leveraged positions and in high-risk positions where play for them is going to work better if interest rates continue to go up. I'm not talking about them. I'm leaving them out of the picture here. I'm talking about everybody else. I think I'm discerning something of a growing consensus or point of view among that crowd that with as much uncertainty as you, yourself, describe here, that we probably ought to proceed slowly from this point forward and let's see how what has been done here actually plays out in the real economy.

Let's give this policy adjustment now, which has four steps already implemented in it, a chance to work before we make any more assumptions one way or another. Because I think the question that Senator Sarbanes was raising, as to where the growth rate is that's achievable without inflationary growth, is a very important issue, and you agree with that. I mean, we want to try to get as close to that as we responsibly can, and I think that's where we all come together is around that proposition.

Chairman GREENSPAN. I agree with that.

The CHAIRMAN. In any event, you're going to have to make your own judgments, but you've had a chance to hear some of our views today, and we've had a chance to hear yours. And I appreciate the effort that you've made to lay out your thinking and the thinking of the Fed at this point.

The Committee stands in recess.

[Whereupon, at 1:05 p.m., Friday, May 27, 1994, the Committee was adjourned, subject to call of the Chair.]

[Prepared statements, response to written questions, and additional material for the record follow:]

PREPARED STATEMENT OF SENATOR CHRISTOPHER J. DODD

Thank you, Mr. Chairman, for convening this important hearing today; and thank you, Chairman Greenspan for agreeing to testify.

It will certainly come as no surprise to you, Chairman Greenspan, that as a Member from Connecticut, I am very concerned about the impact of recent interest rate increases on my State and the New England region.

My fears might best be described using a seasonal analogy. Before the recent Fed actions, the economic recovery in Connecticut and much of New England had moved into late winter. While I could see buds on some of the trees, nothing was blooming yet. But spring was right around the corner. With just a little more of the weather we were having, blossoms were sure to emerge.

Then the Federal Reserve stepped in and sent a prolonged cold spell our way, sentencing us to many more months of winter. In fact, I'm afraid that this last rate increase might have been the bone chilling late winter/early spring frost that kills all the emerging growth.

Despite what others may think, I know the Fed doesn't control the weather. And I know that monetary policy decisions are made with respect to the national picture, not one State or region. However, I question whether the monetary policy instruction manual we are using is outdated given the new world economic order. With our domestic economy so intertwined with and impacted by the international economy—in exactly what ways we're not sure—how certain is the Fed about the nature and origins of the "inflation" it is fighting? Are our traditional gauges of inflation and economic growth still relevant? Have we identified the right enemy and are we fighting the right battle?

As a Member from a State and a region that have been economically devastated over the last several years and have yet to recover, I am very concerned about the direction in which we are headed. Many people's economic livelihoods are at stake and they are extremely worried about the future. Are the risks of inflation in some regions so great that it's worth subjecting others to yet more economic devastation? I am very interested in your response, Chairman Greenspan.

PREPARED STATEMENT OF ALAN GREENSPAN

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Mr. Chairman and Members of the Committee, I appreciate the opportunity to appear before you to discuss recent monetary policy.

The Federal Reserve's moves to increase short-term interest rates this year are most appropriately understood in an historical context.

In the spring of 1989, we began to ease monetary conditions as we observed the consequence of balance-sheet strains resulting from increased debt, along with significant weakness in the collateral underlying that debt. Households and businesses became much more reluctant to borrow and spend, and lenders to extend credit—a phenomenon often referred to as the "credit crunch." In an endeavor to defuse these financial strains, we moved short-term rates lower in a long series of steps through the summer of 1992, and we held them at unusually low levels through the end of 1993—both absolutely and, importantly, relative to inflation. These actions, together with those to reduce budget deficits, facilitated a significant decline in long-term rates as well.

Lower interest rates fostered a dramatic improvement in the financial condition of borrowers and lenders. Households rolled outstanding mortgage and consumer loans into much-lower-rate debt. Business firms were able to pay down high-cost debt by issuing bonds and stocks on very favorable terms. And banks, which had cut back on credit availability partly because of their own balance-sheet problems, were able to strengthen their capital positions by issuing a substantial volume of equity shares and other capital instruments and by retaining much of their improved flow of earnings. Moreover, the lower interest rates, together with expanding economic activity, recently have bolstered the commercial real estate market, stemming losses on the collateral underlying some of the largest problem credits of banks and other intermediaries and, in some cases, permitting them to find purchasers for these assets.

The sharp, sustained decline in debt-service charges and the restructuring of balance sheets alleviated the financial distress, enabling the economy to begin to move again in a normal expansionary pattern. When I last testified before you on monetary policy in July 1993, the likelihood that the economy would soon respond more vigorously to these financial developments already was evident both to the Federal

Reserve and to outside analysts. Indeed, I mentioned that, with short-term real rates not far from zero, ". . . market participants anticipate that short-term real interest rates will have to rise as the headwinds diminish if substantial inflationary imbalances are to be avoided." But lingering questions into the second half of 1993 about whether the economy had fully recuperated made the appropriate timing of such action unclear.

Since the latter part of 1993, however, the expansionary effects of the monetary policy of the past few years have become increasingly apparent. Although quarter-to-quarter developments are subject to considerable statistical noise, in an underlying sense real GDP clearly has accelerated. Strength has been particularly evident in interest-sensitive sectors. Business investment has been quite robust, and order books for producers of durable equipment have expanded appreciably. Housing starts rose in the last 3 months of 1993 to their highest level in over 4 years; although they have dropped back some more recently, they remain 18 percent above a year ago. Demand for motor vehicles has been strong, lifting production of many types of automobiles and light trucks to capacity. Moreover, as economic conditions have improved in other industrial countries, the growth of our merchandise exports has picked up markedly. Overall industrial utilization has increased to 83½ percent, its highest level since the late 1980's. In excess of two million jobs have been created over the past 12 months, and the unemployment rate has fallen substantially.

In this more robust financial and economic climate, expansion of money and credit has picked up. Business loans—which had contracted over the 1990–93 period—grew at a 9½ percent annual rate in the first 4 months of 1994. Bank lending to consumers also has been quite brisk. The pickup in loan growth seems to reflect both stepped-up short-term credit demands as well as a greater willingness on the part of banks to extend credit. Our surveys as well as anecdotal reports indicate that banks have been easing standards and terms on business loans for more than a year, and they have become more aggressive in seeking to extend consumer and residential mortgage loans. The total debt of private borrowers and State and local governments, which had risen at only a 2½ percent annual rate over the first half of 1993, accelerated to more than a 4½ percent rate over the second half and has maintained the stronger pace during recent months. Although ongoing portfolio adjustments have kept growth in M2 relatively sluggish, it has been increasing a little more quickly this year than last.

Given the stronger economic and financial conditions, it became evident by early 1994 that the mission of monetary policy of the last few years had been accomplished. The "headwinds" were substantially reduced, and the expansion appeared solid and self-sustaining.

Having met our objective, we confronted the question of whether there was any reasonable purpose in maintaining the stimulative level of interest rates held throughout 1993. The answer to that question was no. Maintenance of that degree of accommodation, history shows, would have posed a risk of mounting inflationary pressures that we perceived as wholly unacceptable. Given the resumption of more normal patterns of economic activity and credit flows, a shift in policy stance was clearly indicated.

The question that remained was how to implement this shift. The economy looked quite robust, but we were concerned about the effects on financial markets of a rapid move away from accommodation. Short-term rates had remained unusually low for a long time, and long-term rates persisted well above short-term rates. The resulting attractiveness of holding stocks and bonds was further enhanced by a nearly unbroken stream of capital gains as long-term rates fell, which imparted the false impression that not only were returns on long-term investments quite high, but consistently so. The recovery of the stock market after the October 1987 crash, along with the successful fending off of any significant adverse consequences from that event may also have contributed to investor complacency. Moreover, in these extraordinary circumstances of persistent, low short-term interest rates, moderate growth in the economy, and gradually diminishing market concerns about future inflation, fluctuations in bond and stock prices around broader trends remained quite narrow by historical standards.

Thus, lured by consistently high returns in capital markets, people exhibited increasing willingness to take on market risk by extending the maturity of their investments. In retrospect, it is evident that all sorts of investors made this change in strategy—from the very sophisticated to the much less experienced. One especially notable feature of the shift was the large and accelerating pace of flows into stock and bond mutual funds in recent years. In 1993 alone, $281 billion moved into these funds, representing the lion's share of net investment in the U.S. bond and stock markets. A significant portion of the investments in longer-term mutual funds

undoubtedly was diverted from deposits, money market funds, and other short-term, lower yielding, but less speculative instruments. And, some of those buying the funds perhaps did not fully appreciate the exposure of their new investments to the usual fluctuations in bond and stock prices. To the degree maturity extension was built on a false sense of security and certainty, it posed a risk to financial markets once that sense began to dissipate.

Federal Reserve moves initiated in February along with a number of other developments in the United States and other major industrial economies in the same period were instrumental in radically altering perceptions of where interest rates were going and of the risk of holding longer-term assets. In early February, we had thought long-term rates would move a little higher temporarily as we tightened, but that anticipation was in the context of expectations of a more moderate pace of economic activity both here and abroad than emerged shortly thereafter. The sharp jump in rates that occurred appeared primarily to reflect the dramatic rise in market expectations of economic growth and associated concerns about possible future inflation pressures. The behavior of interest rate spreads between Treasury and private debt—or credit risk premiums—in securities markets offers confirming evidence; the fact that such spreads failed to widen even as long-term interest rates rose dramatically suggests that the rise in long-term rates was seen by market participants as a consequence of a strong economy—not a precursor of a weak one. Given the change in economic conditions, and the market's perception of them, longer-term rates eventually would have increased significantly even had the Federal Reserve done nothing this year.

The rise in long-term rates has reflected increased uncertainty as well as expectations of a stronger economy. While generally expected, the move from accommodation, interacting with the news on the domestic and global economy, triggered a reexamination by investors of their overly sanguine assumptions about price risk in longer-term financial assets. As volatility and uncertainty increased, people began to reverse their previous maturity extensions. They fled toward more price-certain investments at the short end of the yield curve. For example, some flows into bond mutual funds were reversed; investors, fearing further rate increases and awakening to the nature of the risk they had taken on, shifted funds back into shorter-term money market mutual funds and deposits. The sales of securities by bond mutual funds likely contributed to pressures on yields, especially in markets in which they had been important buyers.

Such reduced confidence about predictions of future interest rate movements evidently is a key element in explaining one of the more unusual characteristics of financial market developments in this recent period—the apparent degree of coupling of bond rates in many industrial countries facing different cyclical situations. To be sure, part of the rise in long-term rates in other countries is accounted for by brighter economic prospects, especially in Continental Europe and to some extent in Japan, so that market participants now expect less monetary policy ease in those regions.

But, added to this were the effects of additional uncertainty. In globalized financial markets, with investors having increasingly diversified portfolios across currencies, uncertainty, wherever it originates, can have similar effects on markets for securities denominated in a variety of currencies. When investors were confronted with a market environment they did not anticipate, they quickly disengaged not only from dollar assets, but from all investments that rested on a confident view of the future. The loss of confidence in one's ability to perceive the future does not discriminate between investments in dollar- or mark-denominated securities, for example. The process of disengaging largely resulted in sales of stocks and bonds with the proceeds placed in short-term debt instruments whose prices tend to be more stable. As a consequence long-term rates rose appreciably in most industrial countries. That the effects of decreased confidence partially overrode the differences in economic conditions between the United States and our major trading partners is evidence of the degree of uncertainty in financial markets.

Because we at the Fed were concerned about sharp reactions in markets that had grown accustomed to an unsustainable combination of high returns and low volatility, we chose a cautious approach to our policy actions, moving by small amounts at first. Members of the FOMC agreed that excess monetary accommodation had to be eliminated expeditiously, and a rapid shift would not in itself have been expected to destabilize the economy. We recognized, however, that our shift could impart uncertainty to markets, and many of us were concerned that a large immediate move in rates would create too big a dose of uncertainty, which could destabilize the financial system, indirectly affecting the real economy. In light of the substantial variations in prices of financial assets over the last few months as we adjusted our posture, our worries seem to have been justified. Delaying our actions would not

have been constructive; unrealistic expectations would only have become more firmly embedded and the inevitable adjustment in the financial markets could have been far more difficult to contain. Through this period, many of those who had purchased long-term securities with unduly optimistic expectations about the level and fluctuations in yields have made the needed adjustments. Thus, we judged at our May 17th meeting that we could initiate a larger adjustment, without an undue adverse market reaction. Indeed, markets reacted quite positively, on balance, perhaps because they saw timely action as reducing the degree and frequency of tightening that might be needed in the future.

We initiated the removal of excess monetary accommodation without widespread indications that inflation has picked up. To be sure, manufacturers have reported paying higher prices to suppliers, and prices of basic industrial commodities have risen a good deal in recent months. Moreover the behavior of the dollar on foreign exchange markets over the past several months has been a source of some concern. But wage growth has remained moderate and unit labor costs well contained by marked improvements in productivity. To date. underlying cost increases have been absorbed with little evidence that they have yet passed through into prices for final products.

If we are successful in our current endeavors, there will *not* be an increase in overall inflation, and trends toward price stability will be extended. And to be successful, we must implement the necessary monetary policy adjustments in advance of the potential emergence of inflationary pressures, so as to forestall their actual occurrence. Shifts in the stance of monetary policy influence the economy and inflation with a considerable lag, as long as a year or more. The challenge of monetary policy is to interpret current data on the economy and financial markets with an eye to anticipating future inflationary or contractionary forces and to countering them by taking action in advance.

The alternative—maintaining an accommodative monetary policy until inflation actually begins to pick up—would be detrimental to the best interests of our Nation's economy. History unequivocally demonstrates that monetary accommodation when the economy is strong risks a significant acceleration of inflation. Because of the lags in the effects of monetary policy, inflation once initiated would likely continue to rise for a time even after monetary policy began to tighten. Inflationary expectations would begin to increase, influencing patterns of wage bargaining and interest rates. As a result, monetary policy would need eventually to tighten more sharply than if a more timely and measured approach is taken, possibly even placing the continuation of the economic expansion at risk. Such go-stop policies—implying appreciable fluctuations in inflation rates and amplified business cycle swings—surely impede long-range economic planning, saving, and investment, and diminish our economy's prospects for long-run growth and our ability to employ our growing labor force.

We have attempted to avoid such an outcome by taking actions this year that have substantially removed the degree of accommodation that had been in place last year. Our judgment was that with the financial condition of both borrowers and lenders greatly improved, such action would not impede satisfactory economic growth, but rather would help such growth to be sustained. Clearly, uncertainties regarding the economic outlook remain, and the Federal Reserve will need to monitor economic and financial developments to judge the appropriate stance of monetary policy. Our intention is to promote financial conditions under which our economy can grow at its greatest potential, consistent with steady, non-inflationary expansion of employment and incomes.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR RIEGLE FROM ALAN GREENSPAN

Q.1. You have promptly and publicly announced each of the Fed's 4 interest rate increases this year. I think we have seen that that works well. Can you assure us that the Fed will continue to announce such changes in the future?

A.1. The Federal Reserve instituted provisionally the practice of announcing changes in its operating stance. We have been pleased with the results so far. All market participants receive accurate information at the same time and on the same basis regarding the stance of monetary policy. We will continue to evaluate carefully the results of this procedure.

Q.2. Several months ago, in response to requests for the release of the minutes of Federal Open Market Committee meetings, you announced that you would release them with a 5-year lag, starting with the 1989 meetings, and earlier meetings on a gradual basis going backward. So far, you have released minutes from meetings in the second half of 1988. When can we expect to receive more?

A.2. The Federal Reserve released transcripts from the second half of 1987 and the first half of 1988 on July 1, 1994. Fed staff have been working to prepare transcripts for the first half of 1987. These documents are expected to be released by the end of August.

Q.3. Current projections indicate that deposit insurance premiums for banks are likely to decline sharply within the next 2 years, as the Bank Insurance Fund achieves its required minimum reserve ratio. That could imply that premiums for thrifts will need to remain 15 to 20 basis points higher for many years. Do such large premium differences over a long period of time pose any significant dangers?

A.3. If it becomes clear that SAIF-insured thrift institutions need to pay large premiums relative to BIF-insured institutions over a long period of time, the SAIF-insured institutions would be at a competitive disadvantage and would have strong incentives to convert to BIF or to reduce their reliance on insured deposits. Currently, there is a moratorium on conversions from one insurance fund to another which precludes SAIF-insured institutions from seeking BIF insurance. The moratorium will expire only after SAIF is recapitalized, which is not expected to happen before the year 2000. Once the moratorium expires, the likelihood of a SAIF-member converting to BIF insurance will be influenced by the fee for exiting SAIF and the fee for entering BIF, weighted against the cost of the premium difference.

In the near-term, SAIF-institutions are more likely to focus on reducing their holdings of insured deposits using Federal Home Loan Bank advances or repurchase agreements. A reduced reliance on insured deposits could lead to an eroding insurance assessment base that would require the FDIC to raise SAIF assessment rates even higher, further contributing to the erosion of the assessment base. While it is difficult to predict the magnitude of this potential erosion, at some point the difference between the SAIF and BIF assessment rates might be high enough to threaten the competitiveness of marginal divestment.

At the end of 1993, there were 1,930 SAIF-insured institutions holding $757 billion in assets. Over 1,800 of these institutions are well-capitalized. It would be unfortunate if the recovery of the savings and loan industry, and the SAIF insurance fund, were impeded by a significant actual (or potential) differential between BIF and SAIF deposit assessment rates.

Q.4. The Federal Reserve Board recently approved a merger application by BB&T Financial Corporation after FDIC examiners found substantive instances of racial discrimination in that institution's lending decisions. What consideration did the Fed give to these charges in the process of evaluating the merger proposal?

A.4. As seen by the attached May 23, 1994, Order approving BB&T's merger of three existing subsidiary thrifts into its lead bank, the Board gave significant consideration to the issues raised by the FDIC in its April 12, 1993, examination report of Branch Banking and Trust Company, Wilson, NC (BB&T–NC). As noted in the Order, the FDIC rated the bank's CRA performance as "satisfactory" but noted substantive but isolated instances of disparate treatment involving three of the bank's minority loan applicants in apparent violation of the Fair Housing Act (FHA) and the Equal Credit Opportunity Act (ECOA). (The three apparent violations occurred in 1992 and were among 18,229 HMDA-related applications received by BB&T–NC.) The Order also discusses the initiatives of BB&T–NC to strengthen its compliance with fair lending laws. (See Order for description of initiatives.)

It should be noted that the application before the Board involved an "Oakar" transaction which also required approval of the BB&T–NC's primary regulator, the FDIC. As the Order notes, the FDIC, the agency that had uncovered the apparent violations of FHA and ECOA, had approved the merger proposals of BB&T–NC by the time the Board acted on the applications before it. (On May 23, 1994, the Board also approved another application by BB&T to acquire L.S.B. Bancshares, Inc., of South Carolina. See attached Order.)

Q.5. I understand that the Federal Reserve intends to bid, in competition with a number of private organizations, to serve as central processor for the new Electronic Federal Tax Payment System. Did the Treasury request that the Fed submit a bid, or is the Fed actively seeking this new role on its own? Given that in undertaking this new role the Fed would be replacing private sector entities, which currently handle these tax payments, wouldn't it be consistent with the spirit of the Monetary Control Act for the Fed to include in its bid a private sector adjustment factor, regardless of whether the Treasury determines that the Fed would be acting in a fiscal agency capacity?

A.5. The Treasury did not ask the Federal Reserve Banks to submit a response to the Invitation for Expressions of Interest (IEI). The Board has decided that the Reserve Banks will not submit a response to the IEI. The scope of responsibilities defined in the Treasury's IEI does not represent the best role for the central bank in the tax collection mechanism and is much broader than the Federal Reserve's traditional central banking and fiscal agency responsibilities.

FEDERAL RESERVE press release

For immediate release May 23, 1994

The Federal Reserve Board today announced its approval of the application of BB&T Financial Corporation, Wilson, North Carolina, and its wholly owned subsidiary, BB&T Financial Corporation of South Carolina, Greenville, South Carolina, to merge with L.S.B. Bancshares, Inc. of South Carolina, Lexington, South Carolina, and thereby indirectly acquire LSB's subsidiary banks, The Lexington State Bank, Lexington, South Carolina and The Community Bank of South Carolina, Varnville, South Carolina.

Attached is the Board's Order relating to this action.

Attachment

FEDERAL RESERVE SYSTEM

BB&T Financial Corporation, Wilson, North Carolina

Order Approving the Acquisition of a Bank Holding Company

BB&T Financial Corporation, Wilson, North Carolina ("BB&T"), and its wholly-owned subsidiary, BB&T Financial Corporation of South Carolina, Greenville, South Carolina ("BB&T–SC"), bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have applied for the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to merge with L.S.B. Bancshares, Inc. of South Carolina, Lexington, South Carolina ("LSB"), and thereby indirectly acquire LSB's subsidiary banks, The Lexington State Bank, Lexington, South Carolina, and The Community Bank of South Carolina, Varnville, South Carolina.[1]

Notice of the application, affording interested persons an opportunity to submit comments, has been published (59 *Federal Register* 13,323 (1994)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 3(c) of the BHC Act.

BB&T, with total deposits of $6.3 billion, controls two banking subsidiaries located in North Carolina and South Carolina. BB&T is the ninth largest bank holding company in South Carolina, controlling total deposits of $437.3 million, representing approximately 2.1 percent of total deposits in commercial banking organizations in the State.[2] LSB is the sixth largest commercial banking organization in South Carolina, controlling $573.7 million in deposits, representing 2.8 percent of total deposits in commercial banks in the State. Upon consummation of BB&T's acquisition of LSB, BB&T would become the fifth largest commercial banking organization in South Carolina, controlling $1 billion in deposits, representing 4.9 percent of the total deposits in commercial banks in South Carolina.

Douglas Amendment

Section 3(d) of the BHC Act, the Douglas Amendment, prohibits the Board from approving an application by a bank holding company to acquire control of any bank located outside of the bank holding company's home State, unless such acquisition is "specifically authorized by the statute laws of the State in which such bank is located, by language to that effect and not merely by implication."[3] For purposes of the Douglas Amendment, the home State of BB&T is North Carolina.

The Board previously has determined that the interstate statutes of North and South Carolina permit a bank holding company located in North Carolina to acquire a banking organization in South Carolina.[4] In light of the foregoing, the Board concludes that approval of the proposal is not prohibited by the Douglas Amend-

---

[1] BB&T–SC will merge with and into LSB, with BB&T–SC surviving the merger.

[2] State deposit data are as of December 31, 1993.

[3] 12 U.S.C. § 1842(d).

[4] *See Wachovia Corporation*, 77 *Federal Reserve Bulletin* 1011 (1991); *First Union Corporation*, 72 *Federal Reserve Bulletin* 263 (1986); and *NCNB Corporation*, 72 *Federal Reserve Bulletin* 57 (1986).

ment. Approval of this proposal is conditioned upon BB&T receiving all required State regulatory approvals.

Competitive, Financial, Managerial, and Supervisory Considerations

BB&T and LSB compete directly in the Columbia, South Carolina banking market.[5] BB&T is the 17th largest depository institution in that market, controlling $20.8 million in deposits, representing less than 1 percent of the total deposits in depository institutions in the market ("market deposits").[6] LSB is the third largest depository institution in the market, controlling $456.8 million in deposits, representing 10.4 percent of market deposits. Upon consummation of this proposal, BB&T would control $477.6 million in deposits, representing 10.9 percent of market deposits. The Herfindahl-Hirschman Index ("HHI") for the market would increase by 10 points to 1813.[7]

In light of all the facts of record, including the number of competitors that would remain in the Columbia market, and the small increase in market share and market concentration as measured by the HHI, the Board concludes that consummation of the proposal would not have a significantly adverse effect on competition in the Columbia banking market or any relevant banking market.

The Board also concludes that the financial and managerial resources and future prospects of BB&T, LSB, and their respective subsidiaries and the other supervisory factors the Board must consider under section 3 of the BHC Act are consistent with approval of this proposal. In addition, the Board has determined that convenience and needs considerations are consistent with approval of this application for the reasons more fully discussed in the Board's approval of BB&T's acquisition of three savings-associations under section 5(d)(3) of the FDI Act and incorporated by reference in this Order.[8]

Based on the foregoing and all other facts of record, the Board has determined that this application should be, and hereby is, approved. This approvals is subject to BB&T obtaining all necessary regulatory approvals for the proposed acquisition. The Board's approval of this application also is conditioned upon BB&T's compliance with the commitments made in connection with this application. For purposes of this action, the commitments and conditions relied on in reaching this decision are conditions imposed in writ-

---

[5] The Columbia, South Carolina, banking market is approximated by the Columbia Rand McNally Area and by the remainder of Lexington and Richland Counties, South Carolina.

[6] In this context, depository institutions include commercial banks, savings banks, and savings associations. Market deposit data are as of June 30, 1993, and are based on calculations in which the deposits of thrift institutions are included at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, major competitors of commercial banks. *See WM Bancorp*, 76 *Federal Reserve Bulletin* 788 (1990); *National City Corporation*, 70 *Federal Reserve Bulletin* 743 (1984).

[7] Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market in which the post-merger HHI is over 1800 is considered to be concentrated. The Justice Department has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anti-competitive effects) unless the post-merger HHI is at least 1800 and the merger increases the HHI by 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank mergers for anti-competitive effects implicitly recognize the competitive effect of limited-purpose lenders and other non-depository financial entities.

[8] *BB&T Financial Corporation*, 80 *Federal Reserve Bulletin*—(Order dated May 23, 1994).

ing by the Board and, as such, may be enforced in proceedings under applicable law.

This acquisition may not be consummated before the thirtieth calendar day after the effective date of this Order, or later than 3 months after the effective date of this Order, unless such period is extended by the Board or the Federal Reserve Bank of Richmond, acting pursuant to delegated authority.

By order of the Board of Governors,[9] effective May 23, 1994.

Jennifer J. Johnson
Associate Secretary of the Board

RESPONSE TO WRITTEN QUESTIONS OF SENATOR BOXER FROM ALAN GREENSPAN

The following are questions pertaining to the written responses to my questions provided by the Federal Reserve on May 10, 1994.

Based on your answer to my Question 1 [regarding the merger between Banc One and Valley National Bancorp and the assertion that this case is an important example of lax enforcement of CRA by the Fed]:

Q.1.a. Please provide a summary of your CRA ratings in 1993 and the first 4 months of 1994 by category ("outstanding," etc.) by percent and number for the Nation as a whole and for California.

A.1.a. The following charts show a summary of CRA ratings for State member banks in the Nation as a whole and for California assigned in 1993 and the first 4 months of 1994.

CRA RATINGS
FOR ALL STATE MEMBER BANKS EXAMINED IN 1993

	OUTSTANDING	SATISFACTORY	NEEDS TO IMPROVE	SUBSTANTIAL NONCOMPLIANCE	TOTAL
NUMBER	127	490	26	6	649
PERCENT	19.6%	75.5%	4%	.9%	100%

CRA RATINGS
FOR CALIFORNIA STATE MEMBER BANKS EXAMINED IN 1993

	OUTSTANDING	SATISFACTORY	NEEDS TO IMPROVE	SUBSTANTIAL NONCOMPLIANCE	TOTAL
NUMBER	5	10	3	1	19
PERCENT	26.3%	52.6%	15.8%	5.3%	100%

---

[9] Voting for this action: Chairman Greenspan, Governors Kelley, Lindsey, and Phillips. Absent and not voting: Governor LaWare.

CRA RATINGS FOR ALL STATE MEMBER BANKS EXAMINED 1/1/94 - 4/30/94					
	OUTSTANDING	SATISFACTORY	NEEDS TO IMPROVE	SUBSTANTIAL NONCOMPLIANCE	TOTAL
NUMBER	39	153	3	1	196
PERCENT	19.9%	78.1%	1.5%	.5%	100%

CRA RATINGS FOR CALIFORNIA STATE MEMBER BANKS EXAMINED 1/1/94- 4/30/94					
	OUTSTANDING	SATISFACTORY	NEEDS TO IMPROVE	SUBSTANTIAL NONCOMPLIANCE	TOTAL
NUMBER	0	4	1	0	5
PERCENT	--	80%	20%	--	100%

Q.1.b. Please separately provide the number and percentage of financial institutions that received a "satisfactory" or an "outstanding" CRA rating in 1993 and the first quarter of 1994 where there was a: (i) 1.5 to one or greater disparity in home loan declinations between African-Americans and whites; (ii) a 2.5 to one or greater disparity between African-Americans and whites.

A.1.b. In order to answer your question with information that is readily retrievable, we reviewed minority to white denial rates [1] for 1992 and 1993 HMDA data and determined which banks had minority to white denial rates greater than 1.5 to one. We compared that list with a list of banks examined during 1993 and the first quarter of 1994.

We found that during 1993 and the first quarter of 1994, 438 of the 798 State member banks examined for CRA were HMDA reporters. Of those 438 HMDA reporters that were examined, 108 banks, or 25 percent, were rated outstanding or satisfactory and had home loan denial rate disparities between 1.5 to one and 2.4 to one between minorities and whites. In addition, 107 State member banks, or 24 percent, were rated outstanding or satisfactory and had home loan denial rate disparities of 2.5 to one or greater between minorities and whites.

Q.1.d. Comptroller Ludwig has stated that present CRA ratings are not performance-based. What is your opinion? Unless CRA ratings are fully performance-based, as opposed to effort-based, why should they be given significant weight at merger time?

A.1.d. The CRA specifically requires the Federal banking agencies to take CRA examinations into account in reviewing expansion proposals by insured depository institutions. Thus, the Board, the OCC, and the other Federal banking agencies consider the results

[1] The denial rate reports that we use compare denial rates between minorities and whites, not African-Americans to whites.

of these examinations as important factors in reviewing expansion proposals. These examinations are given significant weight because they represent an on-site and comprehensive review of the performance and policies of insured institutions by the Federal banking agency that is charged with direct supervision of the institution.

Currently, the assessment factors that are evaluated in CRA examinations include a combination of performance and effort. For example, the assessment factors require examiners to evaluate the bank's origination of residential mortgage loans, home improvement loans, and small business and farm loans within its community; the geographic distribution of credit extensions, applications and denials; the bank's participation in Government loan programs for housing and small businesses; the bank's participation in community development projects and programs; the bank's record of opening and closing branch offices and providing services at its offices; and any practices intended to discourage applications for credit. The examiner must also review any evidence of prohibited discriminatory or other illegal credit practices.

In addition to these performance-based criteria, the examiner must evaluate factors that may be viewed as more effort-based, but are nonetheless important to CRA performance. These factors include review of activities of the bank to ascertain the credit needs of all segments of its community; the bank's marketing efforts; special efforts of the bank to make the community aware of its services; and the extent of the involvement of the board of directors in actively formulating the bank's CRA policies and reviewing its CRA performance. These factors allow the agencies to evaluate the extent to which an insured institution maintains a dialogue with its community regarding the needs of the community and the effectiveness of the institution's programs in helping to meet those needs.

The agencies are currently reviewing the CRA examination and rating process with the goal of improving CRA examinations by providing guidance on how performance would be measured.

Q.1.f. Is the Board barred by Regulation B from investigating charges of business loan discrimination? If not, why did the Board not investigate such charges in the Banc One/Liberty National case (the June 2, 1994 decision) and secure specific race-based data?

A.1.f. The Board is not barred by Regulation B from investigating charges of business loan discrimination at institutions and companies that the Board regulates. In fact, the Board regularly examines State member banks to ensure that they do not discriminate in making business loans. In the context of the Banc One/Liberty National application, the OCC supervises the banks cited in the protest of the application, and the Board is required by the Bank Holding Company Act to rely on the examination reports of the OCC as far as possible. As the attached Order indicates, the examinations of these banks found no evidence of illegal discrimination.

Based on your answer to my Question 2 [regarding disclosure of the race and gender composition of a lending institution's Board of Directors and top management]:

Q.2.a. Is there any regulation or policy that bars the Board from investigating charges of employment discrimination in a bank's

CRA policy and management positions? If not, why did the Board not investigate such charges in the Banc One case?

A.2.a. Authority to investigate charges of employment discrimination and to enforce compliance with equal employment opportunity laws rests, at the Federal level, with the Equal Employment Opportunity Commission. Neither the Equal Employment Opportunity Act nor the Community Reinvestment Act grant the Board any authority to investigate charges of employment discrimination against a bank or to enforce compliance with employment statutes.

The Board, along with other Federal agencies, recently addressed employment practices in a joint policy statement on lending discrimination which states that, although not a violation of the Fair Housing Act or the Equal Credit Opportunity Act, the employment of few minorities and others in protected classes can contribute to a climate in which lending discrimination could occur by affecting delivery of services. The policy statement provides recommendations to encourage hiring of minorities and members of protected classes.

Q.2.b. Would the Board approve a merger if a bank admitted that it had systematically failed to promote minorities and women to top policy and CRA management positions?

A.2.b. As noted above, the EEOC is the Federal agency charged with determining whether a company is in compliance with Federal equal employment laws. In the event that the EEOC had determined that an institution is in violation of a Federal employment law, the Board would certainly weigh that violation in determining the competence and integrity of the institution's management in the Board's review of any expansion proposal by that institution.

Q.2.c. What is the Board's position on revised CRA regulations and/or legislation that would make diversity in a bank's top management positions a part of the CRA exam process?

A.2.c. The Board has not yet reviewed the revised CRA proposal, and will consider all aspects of the proposal, including the extent to which compliance with equal employment opportunity laws should be considered in the examination process, in light of the public comments received. Legislation designed to assure equal employment opportunities has, to date, been made applicable to all employers equally. The Board does not believe that insured institutions should be governed by standards that are not applied to all employers.

Based on your answer to my Question 3 [regarding a race and gender disclosure requirement for small business and consumer loans] the California Black and Hispanic Chambers of Commerce and the Greenlining Coalition have raised the issue of disclosure of data on the race and gender of business loan recipients:

Q.3.a. What is your opinion of requiring disclosure of business loans by race and gender, and would you support such as part of a revised CRA, or, in the alternative, support legislation to require such disclosure?

A.3.a. The Board strongly opposes discrimination in any aspect of lending. The Board believes that generally the purpose of fair lend-

ing laws is best served when the evaluation of creditworthiness is colorblind and gender neutral. The Board is concerned that collecting race and gender information for business loans could chip away at the fundamental premise that such information is irrelevant to the credit-granting process. The Board also has some questions about the usefulness of race and gender information on business loans—whether collected as a part of CRA reform or under other fair lending laws. However, this issue is under review in the joint agency CRA review.

Q.3.b. Would you support voluntary disclosure by race and gender of business loans? Would you support disclosure during CRA exams and mergers?

A.3.b. The Board believes collection of information regarding race and gender could interfere with the goal of ensuring neutral credit decisions. This is particularly troublesome in the context of business loans since use of this information for discriminatory purposes would be most difficult to detect in light of the numerous factors lenders consider in evaluating applicants for such loans. Again, however, this area is under review as part of the CRA reform project.

Q.3.c. Does the Board believe that there is as much discrimination in business lending as the Board has discovered for home lending?

A.3.c. The Board is unaware of any studies that have documented the level of any discrimination in business lending. The Equal Credit Opportunity Act, of course, prohibits discrimination in business as well as consumer loans. The Board seeks to ensure, through its examination of State member banks and other means, that lenders do not discriminate, whether in business or consumer loans.

Q.3.d. Please explain in detail your position as to the value of disclosure of data on the race and gender of business loan recipients.

A.3.d. We believe there are practical problems associated with collecting race and gender data for business loans. For example, to collect data on loans to partnerships or corporations, rules regarding demographic makeup of partners or shareholders would be required. Simple rules that ease compliance are likely to produce generalized data that may be too imprecise for statistical analysis. On the other hand, requiring information about all shareholders of a corporation, for example, seems unworkable.

Also, the potential for isolating race or gender as a factor in a credit decision for a home loan is much higher than for a business loan. The credit criteria used to evaluate the ability of a consumer to repay a home loan—essentially, the value of the home, the borrower's income, and credit history—is much more uniform than the criteria used for a business loan applicant. For example, factors such as a business loan applicant's expertise, competition, and collateral may vary widely. Thus, the Board is concerned about the utility of the data, in comparison with the burden of collecting it.

In responding to my recent written question about the percentage of the Federal Reserve's top officers that are Latino or African-American, you state that:

Currently 12 percent of the Board's top staff positions (the official staff) are minorities, which is a higher percentage than in the Federal Government as a whole or in comparable agencies. Three percent of those officers are Hispanic and 8 percent are African-American.

Q.4.a.1. How many of the Fed's 10 Divisions and 5 Offices are currently headed by a minority individual or a woman?

A.4.a.1. One Division is headed by a minority official and that official is the Division Director for almost 300 employees.

Q.4.a.2. How many of these Divisions and Offices have a minority individual or a woman as the second ranking officer?

A.4.a.2. There are four divisions that have either a woman or minority or both as second ranking officers.

Q.4.a.3. How many of these Divisions and Offices have been headed by a minority individual or a woman in the past?

A.4.a.3. In the past, there has been one individual, a woman, who headed a Division.

Q.4.a.4. How does the Federal Reserve compare with other financial agencies in this regard?

A.4.a.4. In the past, the FDIC had a woman as Director of the Office of Legislative Affairs; a minority woman as head of the EEO office; and one minority male as head of their Office of Consumer Affairs. Currently, the FDIC has four women heading Offices or divisions—the Office of Legislative Affairs, the Office of Consumer Affairs, the Office of Training, and the Division of Information Resources Management. There are three women who serve as the second ranking official.

The OCC has had no women or minorities serving in the past as head of a department. At the present time, one minority male is the Senior Deputy Comptroller for Capital Markets, and an Asian Male is second-in-command as Deputy Comptroller for Economic and Policy Analysis.

Q.4.b. You stated that 12 percent of the Board's top staff positions are minorities. Please indicate the title and/or rank of those Latinos and African-Americans in these top positions.

A.4.b. Director, Division of Support Services; Associate General Counsel; Associate Director, Division of Consumer and Community Affairs; Assistant Directors (2) Division of Reserve Bank Operations and Payment Systems; Associate Secretary; Assistant Director, Division of Banking Supervision and Regulation; EEO Programs Director; Assistant Directors (2) Division of Support Services; Assistant Inspector General. We would note, also, that we have one Asian Assistant Director in the Division of Information Resources Management.

Q.4.c.1. You also stated that "one area in which I see major—need for change is the inadequate pace at which women and minorities have moved into the top echelons of the Federal Reserve" and that you "are working diligently to improve . . ." What factors are responsible for the slow pace at which women and minorities have been promoted?

A.4.c.1. The primary factor that has slowed the promotional growth of minorities and women to more senior levels at the Board is the lack of promotional opportunity, particularly at the senior levels. The lack of significant turnover among members of the official staff does not permit the Board to promote staff to the top echelons of the Federal Reserve. Turnover among the official staff at the Board has averaged only 3.3 percent or 16 officers over the last 5 years. This lack of significant turnover has obviously limited the number of available positions. However, we are making progress: For example, 19 percent of the official staff are women, 12 percent are minorities; and 43 percent of the professional staff are women, and 21 percent are minorities.

Q.4.c.2. What actions have you and other Board Members taken to promote women and minorities?

A.4.c.2. The Board, through its support of the Affirmative Employment Program Plan, and in communications to staff regarding the importance of equal opportunity in hiring and promotions, has demonstrated its recognition of the value of diversity and its commitment to equal opportunity. The percentage of women in pipeline positions (pipeline positions are those positions directly below the official staff level) has steadily increased over the last decade, and exceed's the number of women in the officer levels. Racial diversity in the pipeline has also increased.

Q.4.c.3. What actions do you intend to take in the future?

A.4.c.3. The Board has established an Advisory Committee on Affirmative Action. That committee will complete its initial work shortly and will offer recommendations for increasing the representation of women and minorities at the Board. These recommendations will deal with recruitment, development, and skill training. Board officers in four divisions have recently received diversity training and a similar program is in development for at least one other division. In addition, the Board and Reserve Banks are actively participating with eleven private sector partners in a diversity consortium that will produce a "best practices" report based on surveys and on-site visits with selected companies. Participants in the study will use the best practices report to assess and improve their own diversity programs.

Q.4.d. In recruiting for top Fed staff positions, what efforts has the Fed made to hire qualified women and minorities?

A.4.d. Because the Board generally promotes from within, the key to increased diversity in top staff positions is to recruit and retain a cadre of highly qualified women and minorities for entry and mid-level professional positions. The Board has developed and implemented programs that are designed to attract and retain qualified women and minorities, many of whom are among the most highly recruited individuals in their professions. The Board also sources qualified women and minorities from several organizations. Among these are the National Association of Urban Banks, the Black MBA Association, the Hispanic MBA Association, the Black Law Students Association, the NAACP, American Indian Science and Engineering Conference, the Organization of Chinese Americans, predominantly black colleges, and universities and colleges in

geographic regions with high minority populations. The Board is a sponsor of the Minority Professional Development Program for Graduate Studies in Management with a consortium of nine universities. The Board also has a Cooperative Education program which has produced meaningful results.

Regarding your response to my Question 4, could you please provide data on the following:

Q.4.e. Please provide the nationwide number and percentage of senior examiners by race and gender for the Board and the twelve district banks.

A.4.e. The Federal Reserve does not routinely collect information on the number and percentage of senior examiners by race and gender. We have enclosed, however, information available on the race and gender for the System's consumer affairs examiners as of October 22, 1993.

Q.4.f. For each district bank, please provide the number and percentage by race and gender of directors of each Bank. In addition, please provide data on the race and gender of the presidents of each bank since 1913.

A.4.f. See attached tables.

	Gender		Racial and Ethnic Origin					
	M	F	C	AA	H	A	NA	TOTAL
MINNEAPOLIS	78%	22%	89%	0%	0%	0%	11%	100%
Helena	80	20	100	0	0	0	0	100
KANSAS CITY	89	11	89	11	0	0	0	100
Denver	71	29	86	0	0	0	14	100
Oklahoma City	86	14	86	14	0	0	0	100
Omaha	86	14	100	0	0	0	0	100
DALLAS	88	12	88	12	0	0	0	100
El Paso	71	29	57	14	29	0	0	100
Houston	71	29	71	14	14	0	0	100
San Antonio	71	29	86	0	14	0	0	100
SAN FRANCISCO	67	33	100	0	0	0	0	100
Los Angeles	57	43	71	14	14	0	0	100
Portland	71	29	86	14	0	0	0	100
Salt Lake City	57	43	100	0	0	0	0	100
Seattle	71	29	57	29	0	14	0	100
TOTALS	81%	19%	87%	10%	2%	**	1%	100%

* Details may not add to totals due to rounding.
** Less than one-half of one percent

M = Male
F = Female

C = Caucasian
AA = African-American
H = Hispanic

A = Asian
NA = Native American

FEDERAL RESERVE BANK AND BRANCH DIRECTORS
Gender and Racial/Ethnic Origin
By Federal Reserve Office
6/20/94

PERCENTAGES *

	Gender		Racial and Ethnic Origin					
	M	F	C	AA	H	A	NA	TOTAL
BOSTON	89%	11%	100%	0%	0%	0%	0%	100%
NEW YORK	89	11	89	11	0	0	0	100
Buffalo	86	14	86	14	0	0	0	100
PHILADELPHIA	89	11	89	11	0	0	0	100
CLEVELAND	100	0	89	11	0	0	0	100
Cincinnati	86	14	71	29	0	0	0	100
Pittsburgh	71	29	100	0	0	0	0	100
RICHMOND	89	11	89	11	0	0	0	100
Baltimore	86	14	100	0	0	0	0	100
Charlotte	83	17	67	17	0	0	17	100
ATLANTA	89	11	89	11	0	0	0	100
Birmingham	86	14	86	14	0	0	0	100
Jacksonville	71	29	86	14	0	0	0	100
Miami	86	14	86	0	14	0	0	100
Nashville	86	14	86	14	0	0	0	100
New Orleans	57	43	86	14	0	0	0	100
CHICAGO	89	11	100	0	0	0	0	100
Detroit	86	14	86	14	0	0	0	100
ST. LOUIS	89	11	89	11	0	0	0	100
Little Rock	71	29	86	14	0	0	0	100
Louisville	86	14	86	14	0	0	0	100
Memphis	86	14	86	14	0	0	0	100

	Gender		Racial and Ethnic Origin					
	M	F	C	AA	H	A	NA	TOTAL
MINNEAPOLIS	7	2	8	0	0	0	1	9
Helena	4	1	5	0	0	0	0	5
KANSAS CITY	8	1	8	1	0	0	0	9
Denver	5	2	6	0	0	0	1	7
Oklahoma City	6	1	6	1	0	0	0	7
Omaha	6	1	7	0	0	0	0	7
DALLAS	7	1	7	1	0	0	0	8
El Paso	5	2	4	1	2	0	0	7
Houston	5	2	5	1	1	0	0	7
San Antonio	5	2	6	0	1	0	0	7
SAN FRANCISCO	6	3	9	0	0	0	0	9
Los Angeles	4	3	5	1	1	0	0	7
Portland	5	2	6	1	0	0	0	7
Salt Lake City	4	3	7	0	0	0	0	7
Seattle	5	2	4	2	0	1	0	7
TOTALS	225	54	242	27	6	1	3	279

M = Male
F = Female

C = Caucasian
AA = African-American
H = Hispanic

A = Asian
NA = Native American

FEDERAL RESERVE BANK AND BRANCH DIRECTORS
Gender and Racial/Ethnic Origin
By Federal Reserve Office
6/20/94

RAW COUNTS

	Gender		Racial and Ethnic Origin					
	M	F	C	AA	H	A	NA	TOTAL
BOSTON	8	1	9	0	0	0	0	9
NEW YORK	8	1	8	1	0	0	0	9
Buffalo	6	1	6	1	0	0	0	7
PHILADELPHIA	8	1	8	1	0	0	0	9
CLEVELAND	9	0	8	1	0	0	0	9
Cincinnati	6	1	5	2	0	0	0	7
Pittsburgh	5	2	7	0	0	0	0	7
RICHMOND	8	1	8	1	0	0	0	9
Baltimore	6	1	7	0	0	0	0	7
Charlotte	5	1	4	1	0	0	1	6
ATLANTA	8	1	8	1	0	0	0	9
Birmingham	6	1	6	1	0	0	0	7
Jacksonville	5	2	6	1	0	0	0	7
Miami	6	1	6	0	1	0	0	7
Nashville	6	1	6	1	0	0	0	7
New Orleans	4	3	6	1	0	0	0	7
CHICAGO	8	1	9	0	0	0	0	9
Detroit	6	1	6	1	0	0	0	7
ST. LOUIS	8	1	8	1	0	0	0	9
Little Rock	5	2	6	1	0	0	0	7
Louisville	6	1	6	1	0	0	0	7
Memphis	6	1	6	1	0	0	0	7

Racial and Gender Breakout of System's Consumer Affairs Staff as of October 22, 1993

Reserve Bank	Examiners				Officer		Manager(s)				Other In-house			
	White Male	Minority Male	White Female	Minority Female	Race	Sex	White Male	Minority Male	White Female	Minority Female	White Male	Minority Male	White Female	Minority Female
Boston	4	0	0	0	W	M	0	0	0	0	0	0	0	0
New York	14	8	4	3	W	F	0	1	1	0	1	0	1	0
Philadelphia	4	2	2	1	W	M	0	0	0	1	0	0	0	0
Cleveland	3	2	2	2	W	M	1	0	0	0	0	0	0	0
Richmond	9	1	3	0	W	M	0	0	0	0	1	0	1	0
Atlanta	5	3	9	3	B	F	1	0	0	0	1	0	1	2
Chicago	15	3	4	2	W	M	3	0	0	0	2	3	5	2
St. Louis	4	0	3	1	W	M	0	0	0	0	0	0	1	0
Minneapolis	9	1	4	0	W	F	0	0	1	0	0	0	1	0
Kansas City	6	3	9	2	W	M	0	0	1	0	0	0	0	0
Denver					W	M	0	0	1	0				
Dallas	0	2	1	1	W	M	0	1	0	0	0	0	1	0
San Francisco	5	4	6	3	W	M	0	0	0	1	2	0	0	2
System	78	29	47	18	10 White, Male 2 White, Female 1 Minority, Female		5	2	4	2	7	3	11	6
Percentages	45%	17%	27%	10%			38%	15%	31%	15%	26%	11%	41%	22%
% Minority				27%						31%				33%
% Female				38%						46%				63%
% Minority and/or female				55%						62%				74%

Karen Horn served as President of the Federal Reserve Bank of Cleveland from May 1982 until April 1987. Cathy Minehan has just been named as the President of the Federal Reserve Bank of Boston. To the best of our knowledge, all other Reserve Bank Presidents have been Caucasian males.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR CONNIE MACK FROM ALAN GREENSPAN

Q.1. In your testimony to the House Banking Committee earlier this year, you suggested that the market price of gold can be viewed as a reliable indicator of inflationary expectations. In the period since then, the Federal Reserve has raised short-term interest rates by one-and-a-quarter percentage points, but the price of gold today is roughly equal to the price the day after the first interest rate increase in early February. Essentially, if the Fed began this policy shift in order to reduce inflation expectations as indicated by the price of gold, it has failed to do so. Do you agree with the analyses which have appeared in the press suggesting that there may be a technical flaw in the Fed's interest rate targeting procedure? Even though the Fed has raised interest rates, the open market desk continues to inject liquidity into the system at a high rate, which may be why inflation expectations remain high. Can you explain why the Fed appears to be continuing to actually ease credit conditions even as it raises interest rates?

A.1. It is true that inflationary expectations as suggested by the price of gold, implicit inflation premiums on long bonds, and other variables have not significantly contracted since we initiated our monetary tightening February 4th. But monetary policy has long lags before its impact is discernible. As a consequence, I suspect it is too soon to see the types of responses you imply in your question.

With respect to interest rate targeting procedures, the evidence suggests that liquidity is not being injected into the system and credit conditions are not excessively accommodative as we perceived they were in 1993. To be sure, our balance sheet has continued to expand, but much of our security purchases are attributable to the rising demand abroad for U.S. currency. Indeed, over the past 4 months, bank reserves have contracted at about a 5 percent annual rate after growing at a 12 percent rate in 1993. Moreover, expansion of all of the monetary aggregates has been quite sluggish over the first half of this year, especially following our initial move toward tighter policy in early February. M2 and M3 are near or below their lower ends of their target ranges and M1 has slowed to only a 4 percent rate for the year through June. Hence, it is difficult to argue that since we moved interest rates higher that the degree of liquidity in the system has continued to expand at an inflationary pace.

FEDERAL RESERVE press release

For immediate release June 2, 1994

The Federal Reserve Board today announced its approval of the applications of Banc One Corporation, Columbus, Ohio, to acquire Liberty National Bancorp, Inc., Louisville, Kentucky, and thereby indirectly acquire all of Liberty National's subsidiary banks and nonbanking subsidiaries.

Attached is the Board's Order relating to this action.

Attachment

FEDERAL RESERVE SYSTEM

BANC ONE CORPORATION, COLUMBUS, OHIO

ORDER APPROVING THE ACQUISITION OF A BANK HOLDING COMPANY

Banc One Corporation, Columbus, Ohio ("Banc One"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied for the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire Liberty National Bancorp, Inc., Louisville, Kentucky ("Liberty National"), and thereby indirectly acquire Liberty National's subsidiary banks in Kentucky and Indiana.[1] Banc One also has applied under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) to acquire the nonbanking subsidiaries of Liberty National. The Liberty National subsidiaries to be acquired in this proposal are listed in the appendix.

Notice of the applications, affording interested persons an opportunity to submit comments, has been published (59 *Federal Register* 11,605 (1994)). The time for filing comments has expired, and the Board has considered the applications and all comments received in light of the factors set forth in sections 3(c) and 4(c)(8) of the BHC Act.

Banc One, with total deposits of $61.1 billion, controls subsidiary banks in Ohio, Indiana, Michigan, Wisconsin, Illinois, Texas, Colorado, Kentucky, West Virginia, Arizona, California, Oklahoma, and Utah. Upon consummation of the proposal, Banc One would become the largest commercial banking organization in Kentucky, controlling $5.1 billion in deposits, representing 14.8 percent of the total deposits in commercial banking organizations in the State.[2] In Indiana, Banc One would remain the second largest commercial banking organization, controlling $6 billion in deposits, representing 12.2 percent of the total deposits in commercial banking organizations in the State.

Douglas Amendment Analysis

Section 3(d) of the BHC Act, the Douglas Amendment, prohibits the Board from approving an application by a bank holding company to acquire control of any bank located outside of the bank holding company's home State, unless such acquisition is "specifically authorized by the statute laws of the State in which such bank is located, by language to that effect and not merely by implication."[3] For purposes of the Douglas Amendment, Banc One's home State is Ohio.

The Board previously has determined that the interstate statutes of Kentucky and Indiana permit a bank holding company located in Ohio to acquire banking organizations in those States.[4] Based on

[1] In connection with this application, Banc One has requested approval to acquire an option to purchase up to 17 percent of the voting shares of Liberty National. This option will terminate upon consummation of this proposal.

[2] State deposit data are as of December 30, 1993.

[3] 12 U.S.C. § 1842(d). A bank holding company's home State is that State in which the operations of the bank holding company's banking subsidiaries were principally conducted on July 1, 1966, or the date on which the company became a bank holding company, whichever is later.

[4] *See Banc One Corporation*, 78 *Federal Reserve Bulletin* 699 (1992) (acquisition of Kentucky banks by Ohio bank holding companies); *Banc One Corporation*, 72 *Federal Reserve Bulletin* 422 (1988) (acquisition of Indiana banks by Ohio bank holding companies). Under Kentucky law, each bank to be acquired must have been in existence for at least 5 years, and the proposed transaction must not result in the acquiring organization controlling more than 15 percent of

Continued

all the facts of record, the Board has determined that its approval of this proposal is not prohibited by the Douglas Amendment. Approval of this proposal is conditioned upon Banc One receiving all required State regulatory approvals.

Competitive Considerations

Banc One and Liberty National compete directly in the Lexington, Kentucky, and Cincinnati, Ohio, banking markets.[5] Banc One is the largest depository institution in the Lexington market, controlling $1.1 billion in deposits, representing 31 percent of the total deposits in depository institutions in the market ("market deposits").[6] Liberty National is the fifth largest depository institution in the market, controlling $201.5 million in deposits, representing 5.7 percent of market deposits. Upon consummation of this proposal, Banc One would control $1.3 billion in deposits, representing 36.5 percent of market deposits. The Herfindahl-Hirschman Index ("HHI") for the market would increase by 349 points to 1672.[7] Banc One has committed to divest two branches in this market to mitigate any potential anti-competitive effects of this proposal, and with these divestitures, Banc One would control 34.7 percent of market deposits and the HHI would increase by 238 points to 1561.[8] In the Cincinnati banking market, consummation of the proposal would not exceed the Department of Justice merger guidelines.[9]

In light of all the facts of record, including the number of competitors remaining in the markets, the increase in market share and market concentration as measured by the HHI, and the proposed divestitures, the Board concludes that consummation of the proposal would not have a significantly adverse effect on competi-

---

total deposits held by depository institutions in Kentucky. Ky. Rev. Stat. Ann. §§287.900(2) and (3). Each of Liberty National's subsidiary banks has been in existence for 5 years, and upon consummation of this proposal, Banc One would control approximately 11.9 percent of the total deposits in depository institutions in Kentucky.

[5] The Lexington, Kentucky, banking market is approximated by the counties of Bourbon, Clark, Fayette, Jessamine, Powell, Scott, and Woodford, all in Kentucky. The Cincinnati, Ohio, banking market is approximated by Dearborn County, Indiana; Boone, Campbell, Grant, Kenton, and Pendleton Counties in Kentucky; Clermont and Hamilton Counties in Ohio, and parts of Brown, Butler, and Warren Counties in Ohio.

[6] In this context, depository institutions include commercial banks, savings banks, and savings associations. Market deposit data are as of June 30, 1993, and are based on calculations in which the deposits of thrift institutions are included at 50 percent. The Board previously has indicated that thrift institutions have become, or have the potential to become, major competitors of commercial banks. *See WM Bancorp,* 76 *Federal Reserve Bulletin* 788 (1990); *National City Corporation,* 70 *Federal Reserve Bulletin* 743 (1984).

[7] Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (June 29, 1984), a market in which the post-merger HHI is between 1,000 and 1,800 is considered moderately concentrated. The Justice Department has informed the Board that a bank merger or acquisition generally will not be challenged (in the absence of other factors indicating anti-competitive effects) unless the post-merger HHI is at least 1,800 and the merger increases the HHI by 200 points. The Justice Department has stated that the higher than normal HHI thresholds for screening bank mergers for anti-competitive effects implicitly recognize the competitive effect of limited-purpose lenders and other non-depository financial entities.

[8] Banc One has executed an agreement to sell the two branches in the Lexington banking market to a bank holding company that currently operates in the market and has committed to complete these divestitures within 180 days of consummation of the transaction. Banc One also has committed that, in the event it is unsuccessful in completing these divestitures within 180 days of consummation of the proposal, it will transfer the relevant office or offices to an independent trustee with instructions to sell the office or offices promptly. *See BankAmerica Corporation,* 78 *Federal Reserve Bulletin* 337, 340 (1992); and *United New Mexico Financial Corporation,* 77 *Federal Reserve Bulletin* 484, 485 (1991).

[9] In the Cincinnati banking market, Banc One would become the fifth largest depository institution in the market, controlling $909.7 million in deposits, representing 4.8 percent of market deposits. The HHI for the market would increase by 10 points to 1221.

tion in the Lexington and Cincinnati banking markets or any relevant banking market.

Convenience and Needs Considerations

In acting upon an application to acquire a depository institution under the BHC Act, the Board must consider the convenience and needs of the communities to be served, and take into account the records of the relevant depository institutions under the Community Reinvestment Act (12 U.S.C. § 2901 *et seq.*) ("CRA"). The CRA requires the Federal financial supervisory agencies to encourage financial institutions to help meet the credit needs of the local communities in which they operate, consistent with the safe and sound operation of such institutions. To accomplish this end, the CRA requires the appropriate Federal supervisory authority to "assess the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of such institution," and to take that record into account in its evaluation of bank holding company applications.[10]

The Board has received comments from several organizations and an individual on this proposal. Three community-based organizations and an individual in Kentucky commented in favor of the proposal, commending Liberty National's commitment to affordable housing in Louisville, and its development of lending programs for minority and low- and moderate-income borrowers. The Board also received comments opposing the proposal, including comments from the National Community Reinvestment Network representing several organizations ("Protestants"). Protestants' allege, on the basis of data filed under the Home Mortgage Disclosure Act ("HMDA") (12 U.S.C. § 2801 *et seq.*), that Banc One and Liberty National have engaged in discriminatory lending practices against African-Americans in housing-related loans, and that both institutions have failed to meet the credit needs of minority-owned small businesses.[11] Protestants further allege that the two organizations have a poor record of marketing and outreach to the African-American community.

The Board has carefully reviewed the CRA performance records of Banc One, Liberty National, and their respective subsidiary banks, as well as all comments received regarding these applications, Banc One's responses to those comments, and all other relevant facts of record in light of the CRA, the Board's regulations, and the Statement of the Federal Financial Supervisory Agencies Regarding the Community Reinvestment Act ("Agency CRA Statement").[12]

---

[10] 12 U.S.C. § 2903.

[11] Protestants' comments relate to the Ohio subsidiary banks of Banc One in Columbus, Cincinnati, Cleveland, and Akron, and Liberty National's subsidiary banks in Louisville and Erlanger, both in Kentucky, and in Charlestown, Indiana. Protestants also maintain that there is insufficient information about the specific CRA activities of Banc One to support approval, including a lack of information about Banc One's charitable contributions and the ethnic composition of its small-business and consumer-loan applicants. Protestants have also requested that the Board make a referral to the Department of Justice, and have indicated that they filed their comments on these applications with the Department of Justice on March 31, 1994.

[12] 54 *Federal Register* 13,742 (1989).

Records of Performance Under the CRA

A. Evaluations of CRA Performance

The Agency CRA Statement provides that a CRA examination is an important and often controlling factor in the consideration of an institution's CRA record and that these reports will be given great weight in the applications process.[13] Banc One's lead subsidiary bank in Ohio, Bank One, Columbus, N.A. ("Bank One–Columbus"), received an "outstanding" rating from the Office of the Comptroller of the Currency ("OCC") at its most recent examination for CRA performance as of April 28, 1993. In addition, all but one of Banc One's remaining 80 subsidiary banks that have been examined for CRA performance received either "outstanding" or "satisfactory" ratings from their primary regulators in the most recent examinations of their CRA performance.[14]

Liberty National's lead bank, Liberty National of Louisville ("Liberty Bank–Louisville"), received an "outstanding" rating from its primary regulator, the OCC, at its most recent examination for CRA performance as of August 31, 1992. In addition, all of Liberty National's remaining six subsidiary banks that have been examined for CRA performance received either "outstanding" or "satisfactory" ratings from their primary regulators in the most recent examinations of their CRA performance.[15]

In connection with several recent applications, the Board has reviewed in detail the performance ratings of Banc One's subsidiary banks in light of Banc One's corporate CRA policies.[16] For the reasons more fully stated in those orders, which are incorporated by reference, the Board has found that these policies have substantively contributed to the satisfactory or better CRA performance evaluations achieved by almost all of Banc One's subsidiary banks. Following consummation of this proposal, Banc One will integrate Liberty National completely into its community reinvestment program, and each Liberty National subsidiary bank will adopt Banc One's CRA policies to enhance its CRA programs.

B. HMDA Data

Protestants allege that data required to be filed under the HMDA show that Banc One's subsidiary banks in Columbus, Cincinnati, Cleveland, and Akron, and Liberty Bank–Louisville, Liberty Bank–Indiana, and Liberty Bank–Northern Kentucky, discriminate against African-Americans in the provision of home pur-

---

[13] *Id.* at 13,745 (1989). Protestants disagree with the CRA performance evaluations of Banc One and Liberty National's subsidiary banks by Federal banking supervisors, and allege that these evaluations are contrary to relevant lending data.

[14] In this regard, Bank One, Akron, N.A. ("Bank One–Akron") was assigned a rating of "satisfactory" by the OCC as of February 26, 1993; and Bank One, Cincinnati, N.A. ("Bank One–Cincinnati") was assigned a rating of "satisfactory" by the OCC as of July 20, 1993. The OCC assigned a rating of "needs to improve" to Bank One, Cleveland, N.A. ("Bank One–Cleveland") as of April 12, 1993. As discussed in this order, Banc One has taken corrective steps to improve the CRA performance of this bank.

[15] In this regard, Liberty National Bank of Indiana ("Liberty Bank–Indiana") was assigned a rating of "outstanding" by the OCC as of May 31, 1993; and Liberty National Bank of Northern Kentucky ("Liberty Bank–Northern Kentucky") was assigned a rating of "satisfactory" by the OCC as of August 31, 1992.

[16] *Banc One Corporation (FirsTier)*, 79 *Federal Reserve Bulletin* 1168 (1993) ("the FirsTier Order"); *See also Banc One Corporation (Valley National Corporation)*, 79 *Federal Reserve Bulletin* 524 (1993) ("the Valley National Order").

chase mortgage and refinancing loans.[17] In particular, Protestants contend that the disparities shown in the 1992 data in the number of loan applications from and originations to African-Americans, and in the denial rates for African-Americans, when compared to white borrowers indicate illegal discriminatory practices.

In some categories, the HMDA data for 1992 indicate that these Banc One and Liberty National banks are lending at a level that meets or exceeds their peers. For example, HMDA-reported loan originations by Banc One's Ohio subsidiaries to African-Americans in 1992, as a percentage of total loans originated by these banks, exceeds the aggregate percentage of loans made to African-Americans by peer organizations. Furthermore, the data indicate an increase from 1992 to 1993 in the number of HMDA-reported loan applications received from African-Americans by Banc One's four subsidiary banks, as well as an increase in the number of originations to this group.[18] However, both the 1992 and 1993 data show a low number of housing-related loans to African-Americans, and disparities in the declination rates for African-Americans compared to white applicants at the subsidiary banks of both Banc One and Liberty National.[19]

The Board is concerned when an institution's record indicates disparities in lending to minority applicants and believes that all banks are obligated to ensure that their lending practices are based on criteria that assure not only safe and sound lending, but also assure equal access to credit by creditworthy applicants regardless of race. The Board recognizes, however, that HMDA data alone provide only a limited measure of any given institution's lending in its community. The Board also recognizes that HMDA data have limitations that make the data an inadequate basis, absent other information, for conclusively determining whether an institution has engaged in illegal discrimination in making lending decisions.

The most recent OCC examinations for CRA compliance and performance of Banc One's subsidiary banks in Columbus, Cincinnati, Cleveland, and Akron found no evidence of illegal discrimination or other illegal credit practices. Examiners also found no evidence of any practices or procedures that would discourage applications for available credit from any segment of the delineated communities of

---

[17] Protestants also have criticized Liberty National Bank of Lexington, Lexington, Kentucky, for its lack of lending and outreach to African-Americans. That bank, which was assigned a rating of "satisfactory" by the OCC at its most recent examination for CRA performance as of June 30, 1992, was merged into Liberty Bank–Louisville on October 1, 1993.

[18] For example, from 1992 to 1993, the number of loan applications from African-Americans increased from 1736 to 2232, and the number of originations increased from 772 to 901.

[19] Protestants requested that the Board delay action until the Federal Reserve System has conducted a comprehensive study of the home lending practices of the subsidiary banks of Banc One and has conducted an audit of the number and dollar amount of small-business loans and contracts awarded to African-Americans by these banks. Protestants also requested additional time to analyze the 1993 HMDA data or, in the alternative, that the Board not use the data in its' analysis of this case. In addition, Protestants requested that the Board not act on these applications until the two vacancies on the Board have been filled.

The Board has carefully reviewed substantial information relating to the CRA performance of Banc One and Liberty National in this case, including data relating to small-business lending. The Board provided Protestants with a substantial comment period of approximately 98 days, including a 14-day extension of the comment period to submit additional comments and analysis of these applications. Protestant did submit substantial written comments on this case. Based on all the facts of record, including the substantial comments that have been submitted by Protestants, the Board does not believe a further delay in acting on these applications is warranted.

these banks.[20] Moreover, these examinations indicate generally that the geographic distribution of each institution's credit extensions, applications, and denials reflect reasonable penetration in all segments of their delineated communities, including low- and moderate-income areas.[21] In addition, Banc One has taken steps to ensure that all loan decisions are made in accordance with fair lending laws. For example, compliance officers at Bank One–Columbus and Bank One–Cincinnati periodically review files of approved and denied consumer loan applications as part of the corporate compliance program to ensure that the banks' loan process is conducted on a nondiscriminatory basis.

The most recent OCC examinations for CRA compliance and performance of Liberty Bank–Louisville, Liberty Bank–Indiana, and Liberty Bank–Northern Kentucky also found no evidence of illegal discrimination or other illegal credit practices.[22] In addition, examiners found no evidence of any practices or procedures that would discourage applications for available credit from any segment of the delineated communities of these banks. Liberty National's subsidiaries also have a second review process whereby every recommended denial of a mortgage, small business or commercial loan application receives a second review to insure that the recommendation is consistent with fair lending laws.

C. BANC ONE'S RECORD OF PERFORMANCE

Lending Programs of Subsidiary Banks. The FirsTier Order noted that the lending programs at each of the four Banc One subsidiary banks identified by Protestants offered a variety of credit products and services designed to assist in meeting the credit needs of low- and moderate-income and minority neighborhoods, and in particular inner-city neighborhoods, within their delineated communities.[23] The Board has carefully reviewed the lending programs of these banks in light of Protestants' comments and the Board's previous assessment of the banks' lending activities.

Columbus. Bank One–Columbus offers a number of direct and subsidized home-loan products through the Community Home Buyers Program; the Ohio Housing Finance Agency First Time Homebuyers Program; and a variety of Government-sponsored loan programs, including programs through the Federal Housing Authority and the Veterans Administration. In addition, from 1991 through the first quarter of 1993, the bank made 1,627 small business loans totalling $61.5 million, $47 million of which were generated by branches serving low- and moderate-income areas. Furthermore, as of December 31, 1993, the bank had 76 commercial loans and lines

---

[20] Protestants allege that Banc One's subsidiary banks prescreened minority applicants and thereby have been able to lower their denial rates. The OCC found in its 1993 CRA examinations that each bank has adopted policies, procedures, and training programs to preclude illegal credit practices. Periodic self-assessments are also performed at several of the banks to assure the adequacy of these policies, procedures, and programs.

[21] The OCC's 1993 examination of Banc One–Akron found a low number of home purchase applications from minority applicants in 1991. The OCC noted that bank lenders were working with area realtors and a neighborhood organization to increase the number of minority applicants and that the bank adopted a revised marketing plan in 1993 to increase applications from minorities.

[22] The OCC noted some substantive technical violations relating to HMDA reporting and fair lending laws at Liberty Bank–Louisville and Liberty Bank–Northern Kentucky. The OCC has indicated that management implemented appropriate corrective actions during the examination.

[23] *See* the FirsTier Order, *supra*, at 1170–72.

of credit totalling approximately $23 million outstanding to borrowers in census tracts in the Columbus Metropolitan Statistical Area ("MSA") that had a minority population greater than 80 percent.

Cincinnati. Bank One–Cincinnati has introduced a "Welcome Home" loan program designed to facilitate home ownership for low- and moderate-income individuals by reducing down payment requirements and closing costs, eliminating mortgage guaranty insurance, and employing flexible underwriting guidelines. As of June 30, 1993, 131 applications had been approved under this program, including 22 from African-Americans, for a total of approximately $7.8 million. In addition, Bank One–Cincinnati generated 71 small-business-loan applications from low- and moderate-income neighborhoods, and made 30 of these loans during the first half of 1993. The bank had four commercial loans and lines of credit totalling approximately $1 million outstanding to borrowers in census tracts in the Cincinnati MSA that had a minority population greater than 80 percent as of December 31, 1993.

Akron. Bank One–Akron has developed the "Own-A-Home Program," an affordable-housing loan product targeting low- and moderate-income individuals in its delineated community. Through this program, Bank One–Akron extended 77 loans totalling $2.8 million in 1992. Bank One–Akron also extended 385 small business loans totalling $31.9 million in 1992, and participates in various Government-sponsored loan programs. As of December 31, 1993, the bank had 20 commercial loans and lines of credit totalling approximately $2 million outstanding to borrowers in census tracts in the Akron MSA that had a minority population greater than 80 percent.

Cleveland. The Board previously has recognized weaknesses in aspects of the CRA performance of Bank One–Cleveland, and has considered Banc One's efforts to improve its performance in these areas. In approving Banc One's acquisition of Valley National Corporation, the Board required Banc One to submit to the Board, when delivered to the OCC, a copy of its plan to address areas of concern in the CRA program of Bank One–Cleveland, and to submit periodic reports on the progress of this plan.[24] The Board believes that progress has been shown since the Valley National acquisition to improve Bank One–Cleveland's CRA performance. For example, it has introduced several new loan products designed to meet the credit needs of low- and moderate-income communities including: (1) a home-mortgage product with low down payment requirements and flexible underwriting criteria; (2) a mortgage-loan product that covers both acquisition and rehabilitation costs; (3) a secured home-improvement loan product; and (4) a mortgage loan for one-to-eight-unit rental properties.[25] In addition, the bank recently opened a branch in Fairfax, a low- and moderate-income neighborhood in Cleveland. Finally, as of December 31, 1993, the bank had 74 commercial loans and lines of credit totalling approxi-

---

[24] *See* the Valley National Order.

[25] Banc One–Cleveland introduced its Home Buyer's Dream program in May, 1993. This program has a low down payment requirement, provides financing for closing costs, and provides a waiver of mortgage insurance. In the fourth quarter of 1993, Banc One–Cleveland extended 77 loans for a total of $4.4 million under this program. In the third and fourth quarters of 1993, Banc One–Cleveland made 30 home improvement loans, totalling $489,000, to borrowers living in low- and moderate-income areas of the Cleveland metropolitan area, under its home improvement loan program that has a higher-than-usual debt-to-income ratio.

mately $11 million outstanding to borrowers in census tracts in the Cleveland MSA that had a minority population greater than 80 percent.[26]

Ascertainment and Marketing. The Board noted in the Valley National Order that Banc One affiliates actively assess the credit and banking needs of their local service areas. Each affiliate bank is responsible for formulating and submitting to its board of directors a strategic plan for identifying local banking needs. Furthermore, each bank engages in direct communication with its service communities through interviews with community leaders, the creation of community advisory councils, and bank participation in community organizations.

Banc One's subsidiary banks market specific products by advertising on television and radio and in print media. They also supplement corporate marketing materials to meet the individual needs of their banking communities. For example, the OCC's 1993 examination found that Bank One–Columbus maintained and analyzed media demographics and market circulation/coverage data in order to target specific audiences. The examination found that the bank consistently advertises in local newspapers, including minority publications, and advertises on radio stations with large minority audiences. The bank also holds seminars targeted at start-up, minority and female-owned businesses. The OCC's 1993 examination of Banc One–Cincinnati found that the bank attempts to reach low- and moderate-income neighborhoods through the use of door hangers, bus bench advertisements, billboards, and advertisements in publications and on radio stations with large low- and moderate-income and minority audiences. The bank's board of directors and senior management periodically review internal analyses of the geographic distribution of the bank's products, and use these analyses to evaluate marketing efforts in targeted geographic areas and to develop new products to make credit more widely available.

In its 1993 examination of Banc One–Akron, the OCC found that the bank had a comprehensive program for ascertaining credit needs and that the bank advertised its products in low- and moderate-income communities and in a minority-owned newspaper. The OCC noted in its 1993 examination that this bank had instituted a more aggressive marketing plan in 1993 in response to a low level of home mortgage applications from minorities in 1991 and 1992. Finally, the OCC's 1993 examination of Bank One–Cleveland found that it adequately ascertains the credit needs of its community, and that a significant portion of the bank's CRA marketing efforts was devoted to targeted marketing through newsletters and programs sponsored by minority groups. The bank advertises consistently in a newspaper targeted to minorities, and on radio stations that have a significant number of minority listeners.

D. Conclusion Regarding Convenience and Needs Factors

The Board has carefully considered all the facts of record, including the comments received, in reviewing the convenience and needs factors under the BHC Act. Based on a review of the entire record

---

[26] The Board will continue to monitor the progress of Banc One–Cleveland in improving its CRA program, including reviewing progress reports that are submitted to the Federal Reserve Bank of Cleveland on a regular basis.

of performance, including information provided by commenters supporting the proposal and the Protestants, and the CRA performance examinations by the banks' primary regulators, the Board believes that the efforts of Banc One and Liberty National to help meet the credit needs of all segments of the communities served by their subsidiary banks are consistent with approval of these applications. The Board concludes that convenience and needs considerations, including the CRA performance records of the companies and banks involved in these proposals, are consistent with approval of these applications.[27]

Other Considerations

The financial and managerial resources and future prospects of Banc One, Liberty National, and their respective subsidiaries, and other supervisory factors the Board must consider under section 3 of the BHC Act, also are consistent with approval.[28]

Banc One also has applied, pursuant to section 4 of the BHC Act, to acquire the nonbanking subsidiaries of Liberty National that engage in consumer lending, credit-related insurance, and certain securities-related activities. The Board previously has determined that these activities are permissible for bank holding companies under section 4(c)(8) of the BHC Act, the Board's Regulation Y and prior Board orders, and Banc One proposes to conduct these activities in accordance with those regulations and orders. The record in this case indicates that there are numerous providers of these nonbanking services, and there is no evidence in the record to indicate that consummation of this proposal is likely to result in any significantly adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices that would outweigh the public benefits of this proposal. Accordingly, the Board has determined that the balance of public interest factors it must consider under section 4(c)(8) of the BHC Act is favorable and consistent with approval of Banc One's application to acquire Liberty National's nonbanking subsidiaries.

---

[27] Protestants have requested that the Board hold a public meeting or hearing on these applications. The Board is not required under section 3(b) of the BHC Act to hold a hearing on an application unless the appropriate banking authority for the bank to be acquired makes a timely written recommendation of denial of the application. In this case, neither the Kentucky Department of Financial Institutions nor the Indiana Department of Financial Institutions has recommended denial of this proposal.

Generally, under the Board's rules, the Board may, in its discretion, hold a public hearing or meeting on an application to clarify factual issues related to the application, and to provide an opportunity for testimony, if appropriate. 12 C.F.R. 262.3(e) and 262.25(d). The Board has carefully considered this request. In the Board's view, interested parties have had a sufficient opportunity to present written submissions, and have submitted substantial written comments that have been considered by the Board. On the basis of all the facts of record, the Board has determined that a public meeting or hearing is not necessary to clarify the factual record in these applications, or otherwise warranted in this case. Accordingly, the request for a public meeting or hearing on these applications is hereby denied.

[28] Protestants have criticized the employment practices of both institutions relating to minorities, including minority participation in senior management, on boards of directors, and in third-party contracts. In this regard, the Board notes that, because Banc One and Liberty National subsidiary banks employ more than 50 people and act as an agent to sell or redeem U.S. savings bonds and notes, they are required by Treasury Department and Department of Labor regulations to: (1) file annual reports with the Equal Employment Opportunity Commission; and (2) have in place a written affirmative action program which states their intentions, efforts, and plans to achieve equal opportunity in the employment, hiring, promotion, and separation of personnel.

Conclusion

Based on the foregoing and other facts of record, the Board has determined that the applications should be, and hereby are, approved. The Board's approval is expressly conditioned upon compliance with all the commitments made by Banc One in connection with these applications and with the conditions referred to in this order, including obtaining all required State approvals. The determinations as to the nonbanking activities are also subject to all the conditions in the Board's Regulation Y, including those in sections 225.4(d) and 225.23(b)(3) (12 C.F.R. 225.4(d) and 225.23(b)(3)), and to the Board's authority to require such modification or termination of the activities of a holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, or to prevent evasions of the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder. The commitments and conditions relied on by the Board in reaching this decision are deemed to be conditions imposed in writing by the Board in connection with its findings and decision, and, as such, may be enforced in proceedings under applicable law.

The acquisition of Liberty National's subsidiary banks shall not be consummated before the thirtieth calendar day following the effective date of this order, and the acquisition of Liberty National's subsidiary banks and nonbanking subsidiaries shall not be consummated later than 3 months after the effective date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Cleveland, acting pursuant to delegated authority.

By order of the Board of Governors,[29] effective June 2, 1994.

Jennifer J. Johnson
Associate Secretary of the Board

[29] Voting for this action: Chairman Greenspan and Governors Kelley, LaWare, Lindsey, and Phillips.

APPENDIX

Subsidiary Banks to be Acquired

(1) Liberty National Bank and Trust Company of Kentucky, Louisville, Kentucky;

(2) Liberty National Bank of Owensboro, Owensboro, Kentucky;

(3) Liberty National Bank and Trust Company of Central Kentucky, Elizabethtown, Kentucky;

(4) Liberty National Bank of Northern Kentucky, Erlanger, Kentucky;

(5) Liberty National Bank of Shelbyville, Shelbyville, Kentucky;

(6) Liberty National Bank and Trust Company of Indiana, Charlestown, Indiana; and

(7) Liberty National Bank of Western Kentucky, Madisonville, Kentucky.

Nonbanking Subsidiaries to be Acquired

(1) Liberty Financial Services, Inc., Louisville, Kentucky, and thereby engage in consumer lending activities and the sale of credit-related insurance pursuant to sections 225.25(b)(1) and (8)(i) and (ii) of the Board's Regulation Y; and

(2) Liberty Investment Services, Inc., Louisville, Kentucky, and thereby engage in full-service securities brokerage services, riskless principal activities and underwriting and dealing in bank-eligible and ineligible securities pursuant to sections 225.25(b)(15) and (16) of the Board's Regulation Y and prior Board orders.

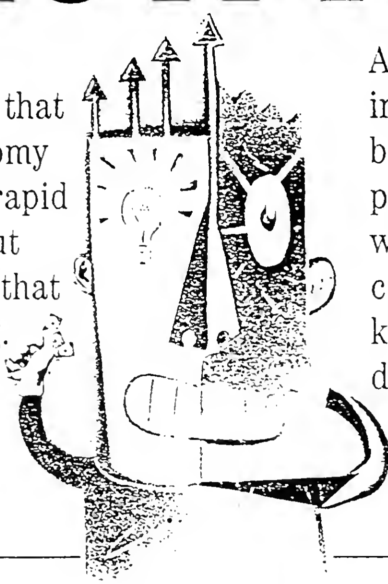
PROFITS FIRST-QUARTER RESULTS FOR 900 COMPANIES STRATEGIES ▶IBM ▶KODAK ▶ROCHE/SYNTEX DERIVATIVES COMPANIES' HIDDEN EXPOSURE

BusinessWeek

MAY 16, 1994 A McGRAW-HILL PUBLICATION $2.75

WHY ARE WE SO AFRAID OF GROWTH?

Conventional wisdom holds that the U.S. economy can't sustain rapid growth without inflation. But that may be wrong. The reason:



A wave of innovation is boosting productivity while global competition is keeping prices down. PAGE [illegible]

Cover Story

WHY ARE WE SO AFRAID OF GROWTH?

CONVENTIONAL WISDOM DOESN'T HOLD ANYMORE

Can't we do better than this?

Ever since the U.S. economy powered ahead at a torrid pace late last year, the financial markets have feared that accelerating growth would send prices spiraling. To beat inflation to the punch by cooling off the economy, the Federal Reserve Board has already raised short-term rates in three quarter-point installments since early February. And Wall Street expects more rate hikes to come, even though the economy expanded at only a 2.6% clip in this year's first quarter.

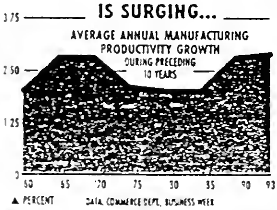
It's beginning to look as though any surge in growth will be squashed in the interests of keeping the inflation demons under control. Most forecasters assume that economywide productivity growth will average some 1% a year. Add to that labor force growth of 1.3% or less, and the long-term growth potential of the economy comes to between 2.0% and 2.5% a year. Any pace faster than that, and the economy rushes headlong into production bottlenecks that ignite a wage-and-price spiral.

Certainly, the Clinton Administration "is comfortable with 2.5% as our long-run forecast," says Laura D'Andrea Tyson, chair of the President's Council of Economic Advisers. And Robert T. Parry, president of the Federal Reserve Bank of San Francisco, recently told a gathering of forecasters that "for the last two years, the rate of growth has been faster than the economy can sustain in the long run." No wonder every bit of good economic news gives the financial markets the jitters—sending bond and stock prices tumbling.

But the fears of the forecasters and the markets may be unfounded. "People

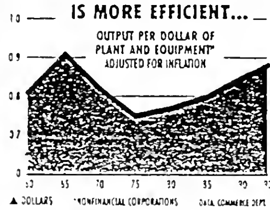
WHY STRONG ECONOMIC GROWTH WON'T CAUSE FASTER INFLATION

PRODUCTIVITY IS SURGING...



...WORKERS ARE MORE SKILLED...

...CAPITAL INVESTMENT IS MORE EFFICIENT...



OUTPUT PER WORKER KEEPS SOARING

KNOWLEDGE CREATES FLEXIBILITY

COMPUTER PRICES ARE STEADILY DROPPING

are taking the last 15 years and just projecting them forward," says Richard Nelson, economist at Columbia University. The conventional outlook underestimates Corporate America's huge productivity gains, a historic wave of technological innovation, and the spread of capitalism around the world. "Productivity has dramatically improved compared with the prior two decades," says Bruce Steinberg, economist at Merrill Lynch & Co. "And improved productivity means the economy can grow more rapidly without triggering inflation."

STILL STINGY. True, the recent pickup in manufacturing activity is raising the specter of production bottlenecks. Yet in an increasingly global economy, many American companies can shift excess order flows to factories overseas. And with nearly one-fifth of all goods bought in the U.S. produced overseas, foreign competitors are eager to expand their sales should stateside companies aggressively raise prices. White-hot international competition puts a damper on the ability of U.S. companies to jack up prices.

Fed Chairman Alan Greenspan agrees that the growth prospects of the U.S. economy have improved. He believes the economy's underlying growth trend of productivity in both manufacturing and services has recently risen to 1.5% and that the noninflationary growth potential of the U.S. is certainly higher than the modest pace projected by conventional wisdom. "U.S. businesses in recent years have been investing in new capital and improving their use of capital in ways that are making the U.S. economy more productive," Greenspan recently wrote.

Still, the Fed isn't joining in any victory dance—at least not yet. Instead, it has been pursuing a tightfisted monetary policy as part of a campaign to convince the markets that it won't let inflation erupt.

FAR FROM BEING A MATURE ECONOMY, THE U.S. IS ONE IN THE THROES OF A HISTORIC TRANSFORMATION

And the markets, it seems, need a lot of convincing. They were seared by megabuck losses during the 1970s price spiral and won't risk trillions more until they have positive proof that higher productivity growth rates are here to stay and inflation will remain dormant. For example, consumer price increases are running at a 2.6% annual rate and investors are demanding a yield of more than 7% on 10-year Treasury bonds. By contrast, when inflation was this low back in the mid-1960s, investors only required a yield of 5%.

How good can growth get before the economy overheats? Perhaps a lot better than most people think. Over the past three years, productivity has been rising far faster than the rate assumed by the typical forecast—a 2.6% average annual rate, similar to the experience of the 1950s and 1960s.

In part, this reflects the typical productivity rebound that follows a recession. But with business equipment investment hitting 9% of gross domestic product, its highest level in the postwar period, the productivity surge is likely to continue. Tack on labor-force growth, and that means the economy's noninflationary growth potential could be as high as 3.5%—and not for two quarters

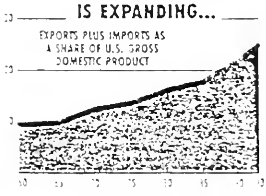
The U.S. economy has expanded at a 2.4% annual rate since 1980. Most forecasters figure that the economy's growth potential is 2.5% at best. But the evidence is mounting that it could be as high as 3.5% without touching off inflation. Here's why:


PRODUCTION CAN BE MOVED OFFSHORE

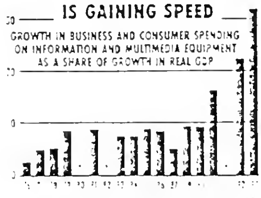

THE U.S. HOLDS THE DIGITAL EDGE


CONSUMERS ARE SITTING PRETTY

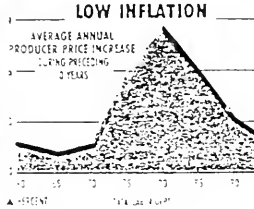
...INTERNATIONAL TRADE IS EXPANDING...



...AND THE INFO REVOLUTION IS GAINING SPEED



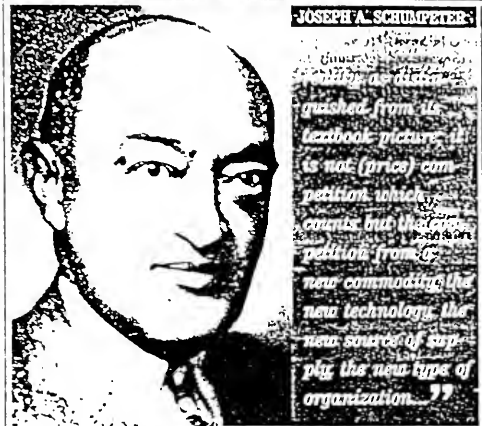
THE RESULT: LOW INFLATION



Cover Story

or a year, but perhaps for the rest of the decade.

The gap between a growth rate of 3.5% and 2.5% may not seem like much, but it's the difference between eating fish eggs and caviar. The higher growth rate would cumulatively add about $1.2 trillion more, in 1987 dollars, to the nation's output by the year 2000. It would increase total business investment over the next six years by $170 billion. Per-capita income would rise to $23,600 instead of $22,250. The federal budget deficit would shrivel, and the U.S. could afford to spend plenty more on education, training, and scientific research, the seed-corn of future growth. Strong growth creates a powerful, self-reinforcing dynamic all its own.



STUNNING PACE. Of course, many economists remain convinced that America can't grow faster because it's a mature economy. The U.S., they say, has lost its economic and technological leadership in field after field to Asian and European rivals. To survive, companies are slashing costs by eliminating workers even entering the fourth year of recovery. The cold war's end, with the resultant cutbacks in the defense industry, is dampening growth, too. "Everyone hopes the rate of technical progress can pick up and the rate of productivity growth will pick up," says Gary Burtless, economist at the Brookings Institution. "But there is little basis for optimism."

But is the U.S. really stuck in mediocrity? "Economies have a way of defying expectations," says Alan Brinkley, a professor of history at Columbia University. For example, economists expected anemic growth in the U.S. in the wake of World War II. But for the following generation the economy grew at a stunning pace. How about the limits-to-growth panic of the 1970s? Oil, food, and other commodities once feared in short supply are now in cheap abundance. Says Robert Eisner, economist at Northwestern University: "Economists look at what has been happening and say that must be natural. Growth has been slow so it must stay slow."

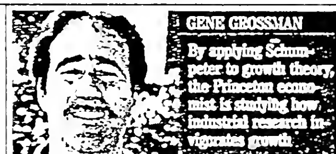
What the slow-growth forecasters fail to appreciate is that the U.S. is in the throes of a transformation. Underlying the recent acceleration in productivity is a gathering web of technological and commercial innovations revolutionizing the economy, much as steam power did in the late 1700s and electricity did in the late 1800s.

The Industrial Era is giving way to the Information Age. "We are living

ECONOMISTS FOR AN EXPANDING UNIVERSE

These days, a growing school of economists are asking what propels growth and drawing inspiration from the ideas of Joseph A. Schumpeter (1883-1950), the Austrian economist and Harvard University professor. Like Schumpeter, these economists are focusing on technology, innovation, and knowledge. And the underlying message of the Schumpeterians is fundamentally optimistic. "The one fact that comes from economic history is the ability of the human mind to break through barriers that weren't imaginable 50 years ago," says Joel Mokyr, economic historian at Northwestern University.

Traditionally, mainstream economics has been unable to explain what determines long-term growth. In the late 1950s, Nobel laureate Robert M. Solow of Massachusetts Institute of Technology showed that increases in the economy's labor supply and capital stock explained only part of growth. The rest was attributed to technological change, but it was largely unexplainable.



The Schumpeterians go beyond traditional economics to look at what really drives technological change. They are analyzing how growth is affected by the support for technical innovation, educational [illegible], and rewards to entrepreneurs for coming up with new products. A leading Schumpeterian is Paul Romer of the University of California at Berkeley, perhaps one of the country's most influential young economist. Romer's theoretical work breaks new ground by showing how technological progress can supercharge growth. Just as a new jet turbine or a new biotechnology drug spells the difference between a plodding economy and a dynamic one, Romer and other new growth theorists are finding [illegible] from [illegible]

through one of these fundamental and profound changes in the economic paradigm built around the transmission, retrieval, and analysis of data and falling transport and communication costs," says Richard Lipsey, an economist and fellow at the Canadian Institute for Advanced Research.

And the Information Revolution is only part of a much bigger innovation wave. U. S. patent applications have surged by a remarkable 35% over the past six years. The financial services industry keeps churning out new products tailored to meet the needs of a global economy. Pioneers in biotechnology and multimedia are building whole new industries. Old-line companies like General Electric, AT&T, and Alcoa are shedding bureaucracies and rigid hierarchies to foster responsiveness and creativity. "Innovation is the mother of all core processes, encompassing all levels and functions of a corporation," says Richard Foster, director at McKinsey & Co. "And U. S. companies are collectively the most innovative in the world."

GROWTH GURU. Conventional economics falls short in dealing with the impact of such momentous upheavals. The kind of models that predict a 2.5% limit to noninflationary growth describe a world where the economy plods ahead at a rate determined by the amount of capital and labor employed, while fiscal and monetary policies are geared toward keeping the economy's fluctuations within a fairly narrow band. Of course, conventional models do an excellent job of describing how interest rates affect home buying or how higher taxes crimp consumer spending. But they are almost mute when it comes to measuring how new technologies affect growth.

To better grasp the relationship between innovation and growth calls for turning to an economic tradition championed by the late Joseph Schumpeter, one of the 20th century's intellectual giants. Schumpeter developed the idea of creative destruction, the process by which new technologies, new markets, and new organizations supplant the old. "Except for Karl Marx, Schumpeter was the only economist who placed strong emphasis on innovation and technological change as sources of economic growth," says Frederic M. Scherer, economist at Harvard University.

> DISINFLATION IS FAST BECOMING THE NORM IN THE ONCE INFLATION-PRONE AMERICAN ECONOMY

In recent years, Schumpeter has become a leading light to a group of economists struggling to answer the most basic question in economics: What drives growth? Like Schumpeter before them, these economists argue that innovation is the essence of capitalism. Knowledge and its application to real business problems count for more than capital and labor, the traditional factors of production. Entrepreneurs, industrial research, and knowledge are what matters (box).

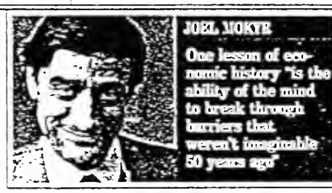
The U.S. is not an aging, mature economy to the Schumpeterians, but rather it can generate almost unlimited possibilities of new goods and new technologies. "Knowledge doesn't face diminishing returns. It's an expanding universe," says Richard Baldwin, economist at the Graduate Institute of International Studies in Geneva. Adds Paul Romer, economist at the University of California, Berkeley: "We systematically underappreciate the potential for new things to happen."

It's easy to lose sight of the importance of innovation on growth because it doesn't have a straight-line impact. Picture this: a chart with an S-shaped curve. When a new technology is introduced into a company, productivity actually falls as workers and managers struggle to master different techniques and skills. But as more and more people move up the learning curve, the new technology begins to pay dividends, and productivity surges ahead. And sometimes innovations come in clusters, such as now with computers, communications, and other high-tech information systems. When that happens, the S-curve effect is magnified as each advancing technology feeds off the other.

History offers striking examples of the S-curve effect. Take electricity. Many of the critical advances came in the 1870s and 1880s. But it wasn't until economic historians as Paul David of Stanford University. His empirical studies show the historic interplay between technological change and economic growth.

The most recent wave of research from the Schumpeterians focuses on the links between international trade and growth. In traditional economic theory, the benefits from free trade to a large economy such as the U. S. come mainly because consumers and businesses can pay lower prices for imports. While this is no small potatoes, it doesn't do much to increase growth in the long run.

Yet free trade may have a much bigger payoff than conventional economics allows. Free trade encourages the rapid spread of technology and industrial ideas, according to such trade theorists as Gene M. Grossman of Princeton, and Elhanen Helpman of Tel-Aviv University, who have been influenced by the pioneering work of Paul R. Krugman of MIT. Trade can also invigorate growth by providing access to bigger markets. Conversely, in many cases, barriers to trade slow the rate of technological transmission, leaving a protectionist country lagging far behind.

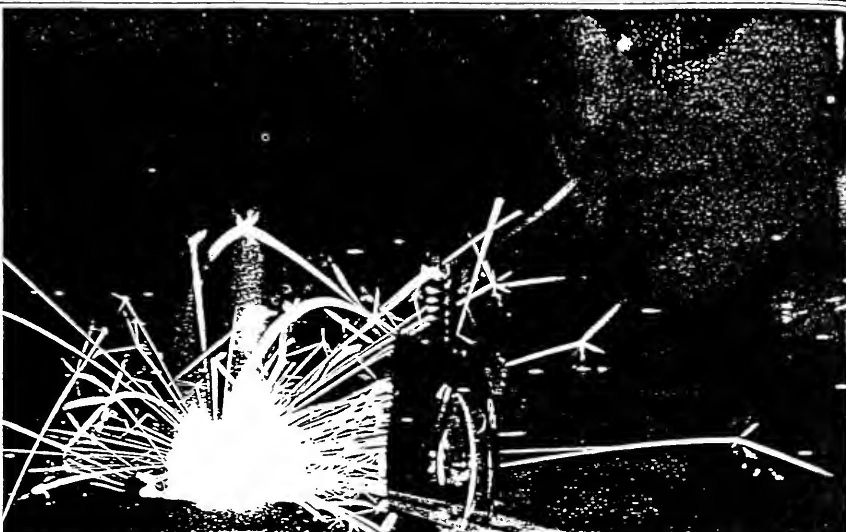


Take the developing countries of Latin America and the former East bloc nations. They learned the hard way that erecting trade barriers to protect domestic industries isolated them from global technological progress and helped condemn them to years of stagnation. And without fierce competitive pressure from the Japanese auto companies, it's doubtful U. S. carmakers would have felt compelled to engineer productivity gains of 10% a year in the 1980s.

Beyond trade, the theory has far-ranging implications for economic policy. Governments, business, and universities have a key part to play in affecting the pace of innovation. Some Schumpeterians would like to see stronger government support of commercial technology, especially in the service sector, and others more industry collaboration to develop world-class products. "To achieve long run success, economic policy must support the institutions that generate ideas and technological progress," says Romer.

By Christopher Farrell in New York

Cover Story



SPARKING GROWTH INNOVATIONS TODAY ARE COMING IN CLUSTERS—COMPUTERS, COMMUNICATIONS, AND INFORMATION SYSTEMS

two to three decades later that the productivity-enhancing promise of electrification was realized. Overall, U.S. productivity jumped to a 2.4% annual rate in the early 1900s vs. a 1.3% pace in the late 1800s, according to Paul David, economic historian at Stanford University.

EVOLUTIONARY CLIMB. Similarly, after a long lag, information technologies are just now living up to their economic promise. Says W. Daniel Hillis, cofounder of Thinking Machines Corp., a Cambridge (Mass.) maker of massively-parallel-processing supercomputers: "Society has to adapt around new technologies. That takes longer than developing the technologies themselves. The good news for the economy is we have a lot of stuff in the pipeline that will start paying off."

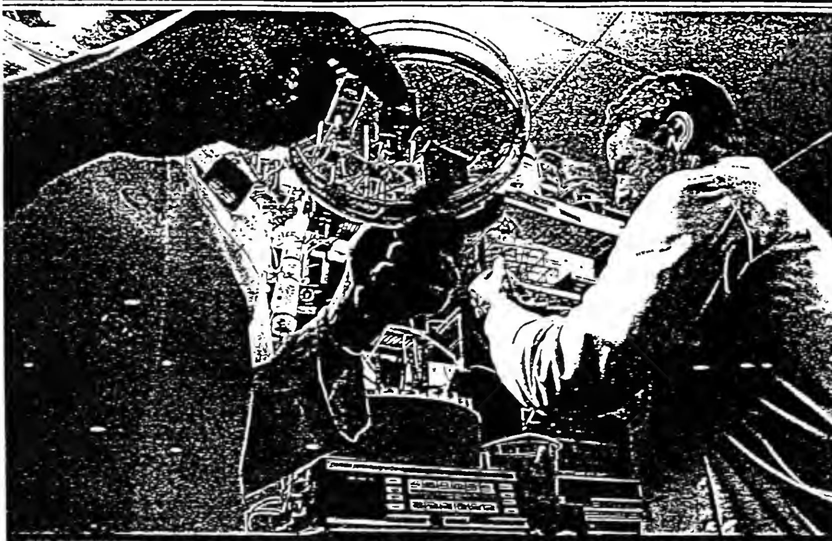
It's about time. For the past decade or more, the gale winds of "destruction" have been all too painful and apparent. Battered by vicious competition at home and abroad, companies have substituted information technologies for labor, eliminating millions of jobs. Corporate layoff announcements in the first quarter were up 11% from the same period last year, according to Challenger, Gray & Christmas Inc., an international outplacement firm. Delta Air Lines Inc. has just announced plans to eliminate 15,000 jobs in a mammoth restructuring, and overall unemployment levels are disturbingly high. The lethal combination of technological change and increased competition has slashed the real wages of low-skill and less educated workers, too.

Now, the signs of the payoff are finally here: Companies are becoming much more efficient. Anheuser-Busch Cos., the world's largest brewer, is replacing packaging equipment installed some 15 to 20 years ago with newer technology that requires fewer workers. Without adding any more workers, Mead Data Central, a leading electronic supplier of databases, is providing access to a lot more data. "We added 100 billion characters in 1993, and we'll probably add 250 billion characters this year," says Rodney L. Everhart, president of Mead Data.

Indeed, the rate of return on telecommunications investment is around 30%, including indirect benefits to the economy, says Francis Cronin, managing director at DRI/McGraw-Hill. And a recent study by Frank R. Lichtenberg, economist at [illegible] [illegible] systems worker can replace six other employees without affecting output.

Savvy companies are also discovering that breaking down the century-old command-and-control bureaucracies has an impact on innovation. For example, Toledo-based Dana Corp., a $5.5 billion producer of automotive and other industrial products, actively solicits ideas from employees at its 197 manufacturing plants scattered all over the world. "The power of that is incredible," says Southwood J. "Woody" Morcott, Dana's chief executive.

"QUITE ISOLATIONIST." Stitching together teams from engineering, design, finance, marketing, and production also seems to be boosting research and development productivity. As Rockwell International Corp. has shifted more of its R&D from long lead-time defense work to the fast-paced commercial market, it is tying its scientists to teams within the organization, according to Robert L. Cattoi, senior vice-president at Rockwell. Says John Seely Brown, head of the Xerox Corp.'s Palo Alto Research Center, better known as PARC: "We've moved from being quite isolationist to having a rich set of [illegible] with [illegible]"



BIO-BEHEMOTH NEARLY NONEXISTENT TWO DECADES AGO, THE BIOTECH INDUSTRY NOW BOASTS ALMOST 700 ACTIVE COMPANIES

more fundamental things than we ever have."

The benefits of the productivity boom are just beginning to boost worker incomes. Wages and salaries, after adjusting for inflation, are rising smartly for the first time in seven years. And a new study by North Carolina State economist Steven G. Allen shows that skilled workers in high-tech companies make more than their counterparts in less innovative outfits. "In industries with lots of R&D activity, you see a much more rapid growth of wages of college graduates," he says. And "it's not just scientists and engineers whose wages go up, it's everybody."

The official statistics fail to capture much of this productivity upturn. Productivity, an inflation-adjusted measure of output per unit of work, is relatively easy to calculate in the manufacturing industries. But when it comes to services or information technologies, which now account for more than two-thirds of the economy, the present measures are inadequate, says Zvi Griliches, economist at Harvard University. For example, more and more supermarkets have installed bar code readers in their checkout lines, making them faster and more accurate. Yet these gains to consumers do not show up in the government's numbers. With prices falling so fast in the high-tech market and quality improving so rapidly, the beancounters make mush of the productivity numbers.

> IN THE HIGH-TECH MARKET, FALLING PRICES AND SOARING QUALITY ARE MAKING MUSH OF THE PRODUCTIVITY NUMBERS

What is clear, however, is that since it takes less money to buy better products, the productivity of capital is enhanced. For instance, computer users are accustomed to increasing their processing power by a factor of 10 every five to seven years at no additional cost. Overall, prices of computers and telecommunications equipment have plunged [illegible] over the past five years. The government statisticians [illegible] suggest that the consumer price index is overstated by some 0.5 percentage point—which would put it at a 2.1% annual rate instead of the posted 2.6%.

The forces holding inflation in check are also powerful. Labor costs are well under control and wage pressures almost completely absent. Unions have been sidelined, too. The number of workers covered by cost-of-living adjustments in major collective bargaining agreements is now lower than at any time in the past quarter century—from a high of 61% in 1976 to a low of 24% in 1993. The three-week strike by 75,000 Teamsters barely disrupted the economy in April. By contrast, when the Teamsters last struck, in 1979, the 10-day work stoppage caused widespread production disruptions.

GLASS CUSHIONS. The old rules of thumb about capacity utilization constraints and inflation flashpoints may no longer work, either. A lot of U.S. companies have plenty of manufacturing capacity abroad. When order flows substantially increase, companies can shift production runs to plants in Mexico, Canada, Asia, and other regions. Take Owens-Illinois Inc., the [illegible]-based king of glass containers. Owens is running its glass plants at [illegible] and

the company is bringing in product from operations in Venezuela and elsewhere. Strong capital goods spending is quickly adding to the capital stock and raising capacity levels. Companies are increasingly adroit at boosting productivity and raising capacity, too. "It seems we get more creative each month," says Donald P. Hilty, chief economist at Chrysler Corp.

Even in those parts of the economy where prices are up, they aren't spiraling. Look at steel. Steel service centers, which purchase and distribute nearly 40% of all U.S.-made stainless steel, are shipping record volumes, and raw-steel producer plants are running near capacity. Over the past year, prices of flat-rolled steel have gone up from $310 a ton to $355, and scrap metal prices from an average of $97 to $147 per ton. But prices are leveling off with excess supply available from overseas makers. The price of scrap, used in minimills, has started to decline. When U.S. scrap prices surged, European buyers turned to cheaper Russian pig iron. "I don't think prices are going to go a lot higher," says F. Kenneth Iverson, chairman and CEO of Nucor Corp.

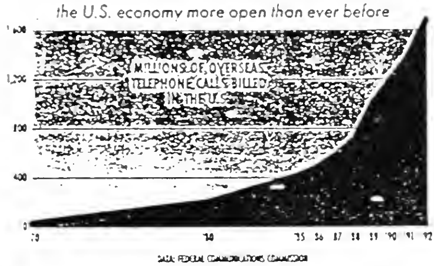
Disinflation is fast becoming the norm in the once inflation-prone U.S. economy. Producer prices are rising at only a 0.2% annual rate, and even medical-care inflation has dropped from an annual rate of more than 9% in 1990 to less than 5% currently. Economists often underestimate how long price trends can last, too. Over long stretches in history, inflation has been well-behaved. For instance, between 1860 and 1916, the annual rate of increase in the consumer price index was 0.3%, and it was 2.5% between 19[illegible] and 1970, says Stephen S. Roach, economist at Morgan Stanley & Co. "With intense competitive pressures offering industry little alternative, there is good reason to believe that the fundamental break between the cost curve of the 1990s and those of the past will persist."

Higher U.S. productivity and technological innovation is a big competitive advantage in overseas markets too. Sure, the U.S. still runs a merchandise trade deficit of some $130 billion a year, and worries about international competitiveness run deep. Japan and Europe are devoting huge private and public resources to nurturing science and technology. And the fast-growing economies of East Asia and Latin America are encouraging foreign multinational investment as a way of transferring manufacturing and management knowhow.

ALTERED POSITIONS. Nonetheless, U.S. companies are globally competitive in many leading-edge industries. The biotechnology industry, for example, was nearly nonexistent two decades ago and now has almost 700 active companies. The foundations of the Information Superhighway are being laid, despite the breakup of the mega-merger between Tele-Communications and Bell Atlantic. China's Guangdong province may be growing at 15% a year, but the Internet is expanding by 15% a month. Competitive high-tech goods are a key reason why U.S. export growth has averaged more than 8% a year over the past seven years—more than three times the gains of Japan and Germany. "And as consumers tap into the Information Highway, the competitive position of nations and industries [illegible]

GLOBAL COMMUNICATIONS ARE ON A ROLL

Traffic in information across borders has soared, making the U.S. economy more open than ever before



DATA: FEDERAL COMMUNICATIONS COMMISSION

AMERICA IS THE ONLY INDUSTRIALIZED COUNTRY TO HAVE DEREGULATED AIRLINES, TELECOM, AND TRUCKING

altered," says Steinberg of Merrill Lynch.

Indeed, in the U.S. there are fewer impediments to "creative destruction" than elsewhere. Regulatory burdens are fewer and market competition more intense. America is the only industrial country to have deregulated its airlines, financial services, telecommunications, trucking, and other industries. For instance, largely reflecting the competitive forces unleashed by deregulation, a blended measure of labor and capital productivity shows the U.S. telecommunications industry is as much as twice as productive as its counterparts in the major European countries, according to an analysis by McKinsey & Co. "What's important is that competition energizes new ways of doing things," says Donald McCloskey, economist at the University of Iowa.

Labor is highly flexible, too. And the nation's borders are more open. Research, development, and technological innovation are skills that are forged in the crucible of international competition. Most important, though, is America's entrepreneurial tradition. From Andrew Carnegie to Bill Gates, the incandescent lightbulb to spreadsheets, the U.S. has long been open to the ideas of innovators, mavericks, and immigrants. And these entrepreneurs have generated tremendous bursts of growth in the past. "What is our comparative advantage?" asks Zoltan Acs, economist at the University of Baltimore. "It is our ability to innovate."

Clearly, the U.S. economy is emerging stronger than it has been after two decades of turmoil. The nation is more productive and more competitive than at any point since the early 1960s. The biggest threat to the wellsprings of faster growth comes from the troubling combination of zealous restraint by policymakers and the inflation jitters of bond market investors. Both threaten to squander the economy's potential strength and all the jobs and wealth it would create.

The U.S. can do better—but not if it continues to fear growth.

By Christopher Farrell, with Michael Mandel [illegible]

BUSINESS

Friendly fire from the Fed

The central bank aims at a barely visible inflation monster, but the shots could wound the economy

Federal Reserve Chairman Alan Greenspan has launched yet another monetary missile. Last week, for the fourth time in three months, the central banker hiked short-term interest rates in an effort to blast inflation off his radar screen. But Greenspan's data detection system may be malfunctioning. His target, growing price pressure, is barely a blip. And his latest salvo could eventually end up wounding American consumers and companies – the economic equivalent of friendly fire.

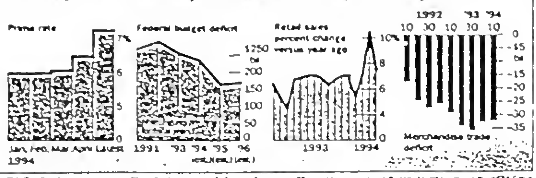
Greenspan's strategy is new and untested. In the past, the Fed waited until price increases started to take hold before pushing up interest rates; today, however, for the first time, the central bank has delivered a pre-emptive strike against inflation, which is running at just 2.4 percent so far this year, compared with 2.7 percent in 1993. The Fed says it has raised rates to keep the three-year-old economic expansion from overheating – not to snuff out growth. And it has indicated that it may not tighten credit again soon. But fine-tuning a $6 trillion economy is fraught with great peril. In 1989, for example, the central bank boosted rates to engineer a "soft landing" for the economy; instead, the country ended up plummeting into recession.

Piloting the economy is even trickier today because Washington's fiscal policy is far more restrictive. The federal budget deficit is expected to decline from about $270 billion to $170 billion between fiscal years 1991 and 1996. And since federal spending can no longer propel growth, as it did during the 1980s, the Fed's interest rate hikes, which could slice into big-ticket consumer purchases, are risky. The central bank's action is hazardous for another reason: Europe and Japan, two of America's largest trading partners, are still mired in recession. Weak demand abroad means that U.S. exports can't be counted upon to turbocharge an economy that now appears to be decelerating.

In fact, tighter credit could slow growth more abruptly in late 1994 and 1995 than most analysts and Fed economists now predict. Although long-term interest rates inched down a bit last week, they are still at their highest level in almost a year and a half. In addition, the central bank's latest move has pushed real interest rates significantly above their historic levels. Since 1977, the average real rate of interest on 30-year Treasury bonds has been 3.66 percent; the real rate of return on the long bond today is about 5 percent. "The level of the long-term rate is a drag on economic growth," says Irwin Kellner, chief economist at Chemical Bank. "The real world wonders what the Fed has been smoking. Businesses are not raising selling prices, consumers are refusing to

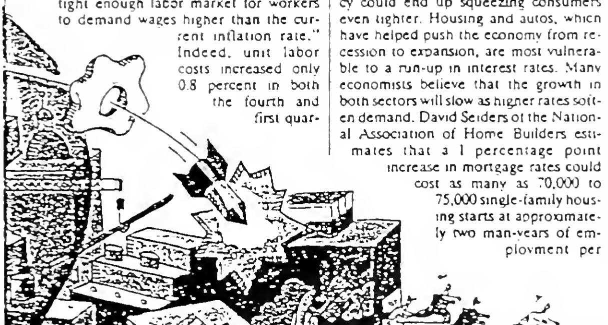
Shutting off growth?

The Fed has boosted interest rates at a time when Washington is reducing its role in the economy. As a result, future growth depends heavily on consumers and exports. But retail sales are starting to fall, and weak foreign economies are contributing to a widening U.S. trade deficit.



pay higher prices and people are worried about their jobs." Adds Sam Nakagama, chairman of Nakagama & Wallace, a Wall Street economic advisory firm. "The Fed has been tightening against a mirage of inflation."

That illusion shimmers uneasily in the job market. Although employment growth has picked up in recent months, the numbers pale in comparison to previous expansions and are not strong enough to create wage pressures. Says Daniel Bachman, an economist at the WEFA Group, a Pennsylvania forecasting firm: "We are still a long way from a tight enough labor market for workers to demand wages higher than the current inflation rate." Indeed, unit labor costs increased only 0.8 percent in both the fourth and first quarters versus a year earlier, the smallest jumps in a decade. One of the reasons for the slack in wages is that temporary-help positions account for nearly 1 in 6 jobs created in America today. What's more, many high-priced white-collar workers, who were laid off in droves during the recession, have yet to land on their feet. "If you look around the economy," explains Bachman, "it doesn't look like all those white-collar employees have found new jobs. They're not ready to start insisting on higher wages yet."



Squeezing consumers. With wages still under pressure, the Fed's monetary policy could end up squeezing consumers even tighter. Housing and autos, which have helped push the economy from recession to expansion, are most vulnerable to a run-up in interest rates. Many economists believe that the growth in both sectors will slow as higher rates soften demand. David Seiders of the National Association of Home Builders estimates that a 1 percentage point increase in mortgage rates could cost as many as 70,000 to 75,000 single-family housing starts at approximately two man-years of employment per house. Seiders recently reduced his forecast for new home construction in 1994 from 1.43 million to 1.38 million units because of higher mortgage rates.

Home sales could also be negatively affected. WEFA's Gideon Naum calculates that if mortgage rates remain above 8 percent for the year, his forecast of existing home sales would fall by up to 200,000 units. And as the refinancing boom draws to a quick close, homeowners who used the extra cash from reduced mortgage payments to buy furniture and appliances are starting to economize. Many of those with adjustable-rate mortgages, which move up or down depending on the market, will be forced to make higher monthly payments because of rising rates.

Americans are doing relatively well, however, compared with their counterparts in Europe and Japan. Foreign growth has averaged just 2 percent over the last two years, according to DRI/McGraw-Hill, a Massachusetts-based forecasting firm. As a result of this weakness abroad, trade is now the worst-performing sector in the U.S. economy. And things could sour even further if higher interest rates eventually ratchet up the value of the dollar, which remained under pressure last week. A stronger greenback will make U.S. exports more expensive and less competitive. This could reduce foreign sales for American companies at a time when rising interest rates start cutting into consumer spending.

Anticipating such a scenario, many members of Congress have voiced concern about the Fed's policies. Their Main Street constituents cannot understand why interest rates are being jacked up when price pressures are so tame. The central bank's actions amount to "a very large tax increase on the middle class," says University of Texas economist James Galbraith. "The Fed has offered nothing in the way of a coherent explanation for what they are doing."

For its part, the White House has said that the Fed's interest rate hikes won't prevent the economy from growing at a 3 percent clip this year. But Bill Clinton and his political advisers remember that the central bank helped shoot down George Bush's economy by allowing rates to remain too high too long during the 1990-91 recession. If the Fed is wrong about inflation and the underlying strength of the economy this time, Clinton could be the one who takes a hit. ■

By William Meyers ...

Fed Goes Ghostbusting

5/6/94 NY,

By Lester C. Thurow

CAMBRIDGE, Mass. The Federal Reserve Board has been spooked by the ghost of inflation. In its panic, the Fed has raised interest rates three times, taking everyone by surprise. Long-term bondholders have lost billions and international currency markets have been rattled. Yet the Fed's economists admit they can't point to even a hint of inflation in the current numbers. They are missing the obvious: the 90's are likely to be an inflation-free decade, and their interest rate hikes will squash the current economic recovery.

The 70's and 80's were inflationary times. The failure to raise taxes to pay for the Vietnam War led to slowly accelerating inflation that exploded with the oil and food shocks of the 70's. Inflation stubbornly receded in the 80's. If the effects of surging health care costs are subtracted from inflation figures, it is clear that more prices have fallen than risen this spring.

Sophisticated investors including George Soros, Citicorp and Bankers Trust took huge losses because of the Fed's action. They were betting on low interest rates because they had no worries about inflation. The Fed's economists contend that it takes 12 to 18 months for higher interest rates to stop inflation, so they are acting now to prevent renewed inflation in 1995. In the Fed's view, the economy is so prone to inflation that even this slow recovery from the 1991-1992 recession — 3 percent growth in 1993 and 2.6 percent in the first quarter of this year — represents an overheated economy.

The 90's began with a deflationary crash in asset values: property prices in the United States declined by up to 50 percent. This trend spread to England, flattened Japan and is now rocking Germany. While the U.S. stock market has risen (the money flowing into pension and mutual funds has had nowhere else to go), the inflation-adjusted fall in the Japanese stock market in the 90's has been bigger than the decline in the American stock market from 1929 through 1932. Worldwide, hundreds of billions of dollars in wealth have been wiped out.

One traditional cause of inflation is a shortage of labor, which drives up wages. Yet global unemployment rates are reaching levels not seen since the Depression. Spain reports 24 percent and Ireland and Finland not much less. In the U.S., if one adds together the officially unemployed, discouraged workers who have stopped actively searching for work and those with part-time jobs who want full-time work, 15 percent of the labor force (19 million) is looking for work.

The Fed is worried that an increasing number of U.S. companies are running close to their production limits — that they will be unable to keep up with the demand for goods, thus

Lester C. Thurow is professor of management and economics at the Massachusetts Institute of Technology.

driving up prices. But in today's global economy, what counts is world capacity, not U.S. capacity. No American will have to wait for a new car: since auto makers in Japan and Europe aren't producing at anywhere near capacity, U.S. producers aren't going to raise prices and sit by and watch their market share erode. While America's economic recovery is under way, the rest of the industrial world shows no sign of coming back; until it does, inflation will not quicken.

The demise of the Soviet Union and the effective collapse of the Organization of Petroleum Exporting Countries in the aftermath of the Persian Gulf War means there will be no repetition of the energy or food shocks of the 70's. What has been happening in aluminum will be repeated in most raw materials: 1.3 million metric tons were exported from the former Soviet Union in 1993, causing the lowest real (adjusted for inflation) prices in history.

Oil prices are lower in real terms than before the first OPEC oil shock in the early 70's, yet exports from the former Soviet Union have barely begun and Iraq has yet to be brought back into world oil markets. When Ukraine comes back into production (it was the world's largest exporter of grain in the 19th century), food prices will plunge.

The decline in real wages that began in the U.S. and is spreading across the industrial world further undermines the Fed's contentions. Among American men, salaries are falling at every education level — for those in the bottom 60 percent income bracket, real wages are 20 percent below 1973 levels. Women with a high school education or less have seen their wages drop, and it looks like the same will happen to college educated women soon. At the same time, productivity is increasing at the highest rates seen since the 60's. Wages down, productivity up — that simply isn't the recipe for inflation.

Raising interest rates is killing the recovery.

Economists differ on the causes of falling wages. Immigration and technical innovation are partly responsible, but some worldwide trends are also behind it. The Communist bloc did not run very good economies but it ran excellent education systems. One-third of humanity, much of it skilled, is joining the capitalist world. If some of the world's best physicists can be hired in Russia for $100 per month, why should anyone pay a third-rate American physicist $50,000 a year?

In the 80's, only 60 million people in Singapore, South Korea, Hong Kong and Taiwan were export-oriented. With the decline of state socialism in East Asia, hundreds of millions of third-worlders (two billion Indians and Chinese) are going to be joining them. Inflation is going to be impossible in any country with open borders: lower-priced goods will flood in from low-wage countries.

In addition, the layoffs at big U.S. companies with high wages and good benefits are unrelenting. More than 109,000 jobs were cut in January, a record. Getting rehired after being laid off usually means a cut in pay, and the competition for these lower-paying jobs drives overall wages — thus inflation — further down.

Since World War II, American companies have typically held prices constant, or even raised them, while distributing the fruits of productivity in the form of higher wages or profits. But under the pressure of international competition, that system is rapidly eroding. In the 90's productivity gains will lead to lower prices, not wage increases.

Large manufacturers are forging new arrangements with their suppliers. For example, Chrysler used to have hundreds of suppliers, but it has given a few of them exclusive rights to supply all of its parts, and Chrysler engineers will give them design information. In exchange, the suppliers will lower their prices every year. In such scenarios, the manufacturers will in turn pass their savings on to customers in the form of lower prices.

At least one member of the Federal Reserve Board has extolled the virtues of zero or negative inflation. This ignores a tenet of capitalism: it doesn't work very well when prices are falling. When prices fall (and many prices must fall to have zero inflation, since some prices will always be rising), the smartest move is to postpone purchases. With prices lower tomorrow, only a fool buys today. So investment falls as people forgo entrepreneurship to become inactive rentiers. Money in the mattress becomes the only smart investment. Deflationary times are tough times.

Yet the Fed is intent on killing a very weak recovery that has yet to include most Americans. The 7 percent growth rate in the fourth quarter of 1993 was heavily concentrated in housing, automobiles and business equipment. High interest rates will hurt these sectors, and the Fed's large rate increases have hit the economy at a time when growth has already slowed dramatically.

Since January, interest rates on 30-year Treasury bonds have risen 1.3 percent and those on 30-year fixed rate mortgages have risen 1.5 percent. These rates did not soar because of worries about inflation. Rather, they reflect the payoff that investors must demand to protect themselves from a Fed that thinks inflation is about to rise from the grave. The Fed's erratic behavior has also led to a currency crisis that made necessary Wednesday's billion-dollar effort to protect the dollar. While nobody has ever been hurt by ghosts, investors are showing that they have real reason to fear a ghost-busting Fed.

ISBN 0-16-046901-5
9 780160 469015
90000